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POPULATION AND ECONOMIC STUDY
LAND USE SURVEY AND ANALYSIS
LAURINBURG, NORTH CAROLINA

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LAND USE SURVEY AND ANALYSIS
LAURINBURG, NORTH CAROLINA

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Department of Housing and Urban Development under the Urban Planning Assistance Program authorized by Section 701 of the Housing Act of 1954, as amended.

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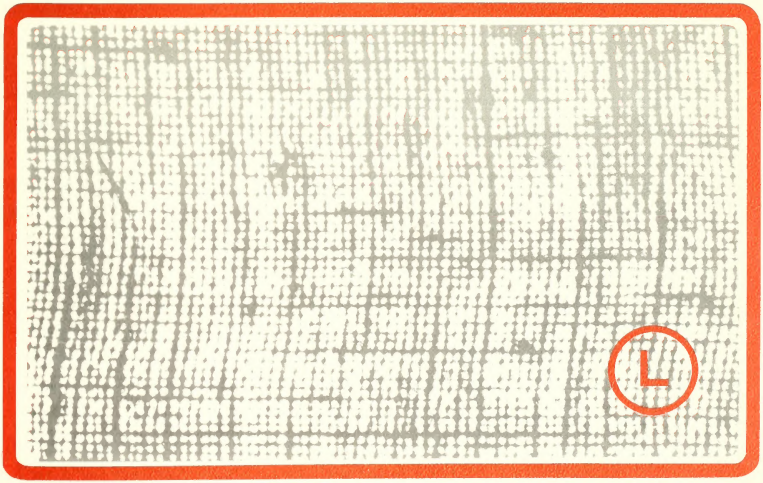
PREFACE

This report is divided into two major sections: Part I Population and Economy, and Part II Land Use Survey and Analysis. The population and economic portion includes trends and projections for the local economy and population. The land use survey and analysis portion provides information upon which to base the Land Development Plan.

LAURINBURG POPULATION AND ECONOMIC STUDY

PART I



INTRODUCTION

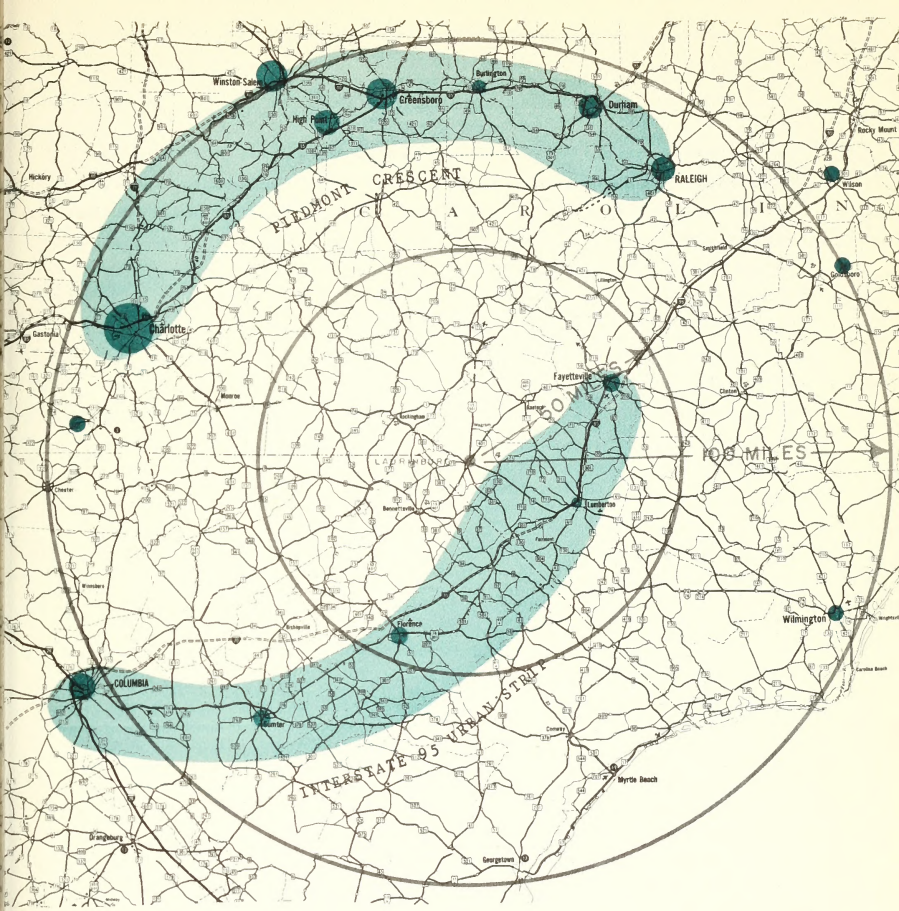
The population and economic information included in Part I of the report are analyzed in order to provide guidelines and projections that will assist in the formation of the Land Development Plan for Laurinburg. Recommendations are included that are vital to the future growth of Laurinburg.

The population and economic information is based primarily on information obtained from published and unpublished U. S. Census data, data obtained from state agencies, and interviews with businessmen and industrialists in Laurinburg.

Laurinburg's geographic location is shown on the Regional Population and Setting Map. The city is located about halfway between Raleigh, North Carolina and Columbia, South Carolina (on a north-south axis); almost halfway between Charlotte and Wilmington, North Carolina (on an east-west axis). The city is situated on U. S. 74, a major highway that links Charlotte and Wilmington, North Carolina.

The Regional Population and Setting Map shows the Piedmont crescent (extends from Charlotte to Raleigh) which includes the most densely populated section of North Carolina. To the east of Laurinburg another crescent is forming along Interstate Highway 95 extending from Fayetteville, North Carolina to Columbia, South Carolina (Fayetteville, North Carolina; Lumberton, North Carolina; Florence, South Carolina; and Columbia, South Carolina).

Laurinburg's economy is interdependent with that of much larger areas. Economic facets affecting Laurinburg are closely related to the economy of the county. Most of the employed persons of Laurinburg work within the county; thus, agricultural and industrial development within the county is the major facet affecting the local economy.



GRADUATED CIRCLES REPRESENT POPULATION OF CITIES OF 15,000 OR MORE PERSONS

15,000
20,000
50,000
100,000
200,000

REGIONAL POPULATION & SETTING

5 0 5 15 35 50
N
MILES

Local commerce (retail trade and services) is affected by the economic development that takes place in the county or within the retail trade area. (Scotland County makes up most of the retail trade area.) Within the trade area or county live the customers who buy at local stores; consequently, a decrease or increase in income in the county is quickly felt by the local merchants.

To analyze Laurinburg's economy, it will be necessary to study not only the city's economy but also the economy of the county and region. Most of the statistical information for this portion of the report is given for the city and county. These geographic areas are next discussed and are shown on the map which follows.

City of Laurinburg -

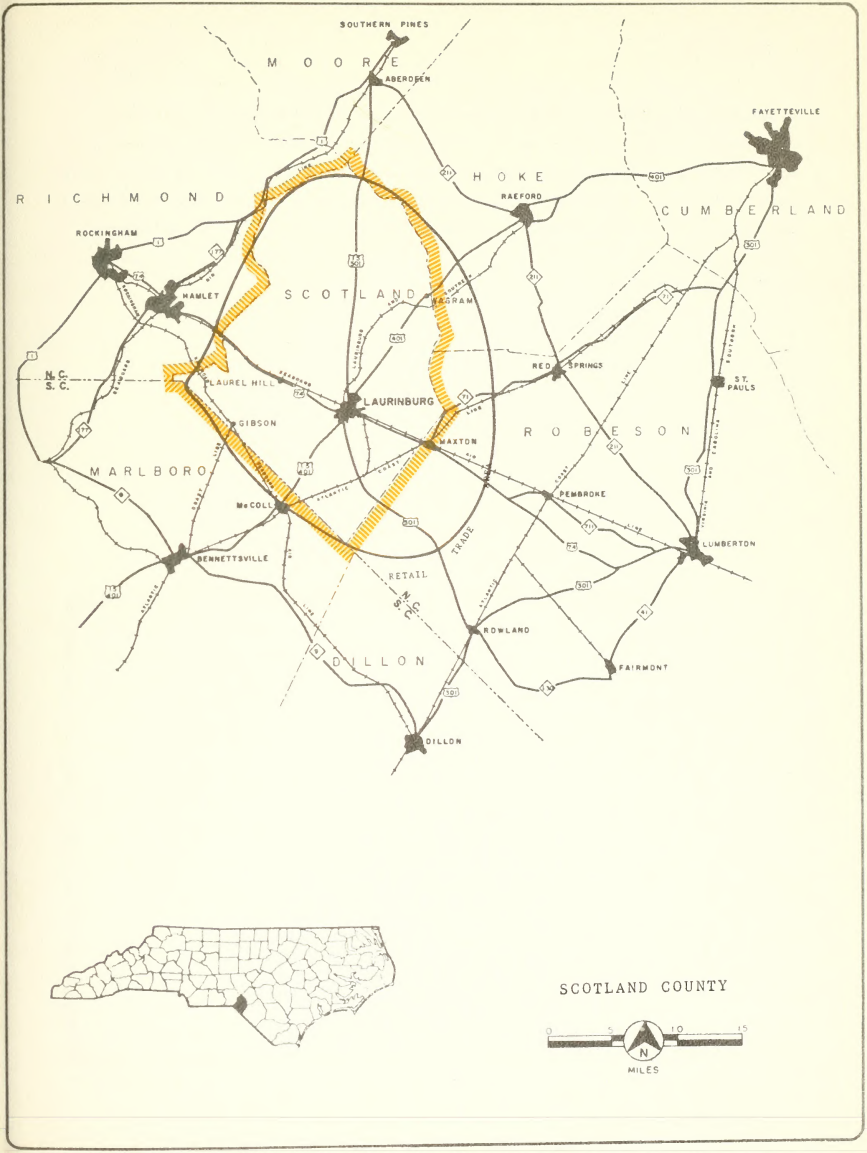
The incorporated areas of Laurinburg are shown on the Past and Proposed Annexation Growth Map. This map shows changes made in the corporate limits of Laurinburg which have affected the statistical information.

Scotland County -

The county provides the strongest influence over the city's economy in that most Laurinburg workers are employed within the county and most of the sales of city merchants come from within the county. (See Scotland County Map.)

The land use survey and analysis part of the study represents an updating of the 1957 Laurinburg Land Use Study which was prepared by City and Town Planning Associates of Chapel Hill, North Carolina.

The purpose of the survey and analysis portion of the study is to inventory and examine factors that have affected the


SOUTHERN PINES
MOORE
ABERDEEN
FAYETTEVILLE
HOKE
RICHMOND
RAEFORD
CUMBERLAND
ROCKINGHAM
HAMLET
SCOTLAND
WAGRAM
RED SPRINGS
ST. PAULS
N.C.
S.C.
LAUREL HILL
LAURINBURG
GIBSON
MAXTON
ROBESON
MARLBORO
McCOLL
PEMBROKE
LUMBERTON
BENNETTSVILLE
RETAIL
TRADE
N.C.
S.C.
ROWLAND
FAIRMONT
DILLON
DILLON
SCOTLAND COUNTY
0
5
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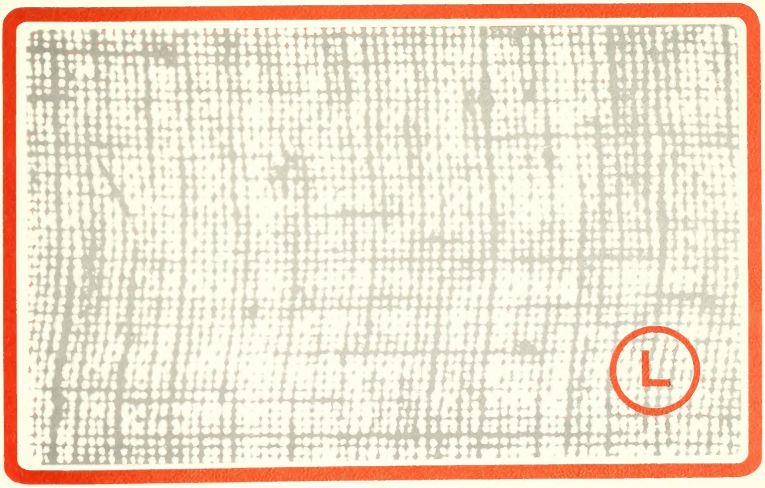
location and type of urban development in Laurinburg and to determine what factors will or should influence future urban development. Some of the factors provide opportunities to create an attractive living environment adequately served with municipal services. Other factors present problems for urban development that must be dealt with if Laurinburg is to provide a suitable environment for its people.

THE ECONOMY



INDUSTRY

The economy of the city and county is dependent upon industrial and agricultural development. Industry and agriculture trends in the county are next discussed.

In terms of the number of plants and the number of employees, textile plants are the most important in Scotland County. In addition to the textile plants, there are other plants that manufacture: timing devices, mobile homes, plywood, friction materials, lumber, and wire. Agriculture business establishments (seed, flour, fertilizer and meat packing) are also important. (See Tables 1 and 2.)

There are twenty five Scotland County industrial establishments that employ 25 or more workers listed on Table 1. Twelve of the plants are located within the Laurinburg Planning Area and the remainder are located within ten miles of Laurinburg. It has been estimated by the Chamber of Commerce that a substantial portion of the workers of the plants, located within 10 miles of Laurinburg, live in or adjacent to Laurinburg.

Industrial plants located in Scotland County in the 1930's and 1940's were heavily oriented to textiles. Textile plants have undergone major expansions in buildings, processes and equipment added since 1960.

Recently there has been added considerable diversification in county industry. Seven plants were added since 1960 including a timing devices plant (Ingraham Company); mobile homes plant (Ritz-Craft Homes); friction materials plant (Johns-Manville); wire plant (REA Magnet Wire); a seed processing plant (Pioneer Corn); a wrought iron furniture plant (Woodard Craft); and a carpet plant (Laurel Crest).

The above industries will provide a cushion for the local economy should the textile industry suffer an ecoromic slump. Although the number and variety of plants has broadened, local

TABLE 1

MAJOR INDUSTRIAL ESTABLISHMENTS IN SCOTLAND COUNTY
RANKED BY NUMBER OF EMPLOYEES AND BY TYPE INDUSTRY - 1967[a]

Name of Company	Classification	Number of Employees
Textiles		
x Springs Mill (1 plant)[b]	Textile bedspreads, kitchen cottons	
xx Springs Mills (3 plants)[b]	Textile bedspreads, kitchen cottons, and bath towels	
x Waverly Mills, Inc. (3 plants)	Yarn mills	
xx Morgan Mills, Inc. (Laurel Hill)	Tire cord fabric	
xx Laurel Crest - Division of Fieldcrest[b]	Carpet	
x Dixiana Mill, Inc.	Carpet distribution	
	SUBTOTAL	3,768
Durable Manufacturing Or Related Establishments		
x Ingrabam Company[b]	Timing devices	
xx Ritz Craft Industry[b]	Mobile homes	
xx Johns-Manville Products Corporation[b]	Friction materials	
x REA Magnet Wire Company, Inc.[b]	Magnet wire	
x Laurinburg Plywood	Plywood	
x Sinclair Lumber, Inc.	Lumber	
xx Myers G. B. & Sons	Lumber	
x Scotland Concrete Company, Inc.	Transit mix concrete	
xx Lumbee Timber Company, Inc.	Sawmill	
xx Coy Furniture Company, Inc.[b]	Tables	
xx Woodard Craft[b]	Furniture	
	SUBTOTAL	1,369
Agri-Business		
xx McNair Seed Company & Farms	Seed and general farm	
x Laurinburg Milling	Flour	
x Dixie Guano Company, Inc.	Fertilizer	
xx Luter Packing	Meat packing	
xx Pioneer Corn[b]	Seed corn	
	SUBTOTAL	249
	TOTAL	5,386

Source: Laurinburg Chamber of Commerce.

[a] Establishments with 25 or more employees.

[b] Added or has undergone major expansion since 1960.

x Plant located in the Laurinburg Planning Area.

xx Plant located in Scotland County.

industrial employment is still heavily oriented to textiles, and continued efforts to diversify employment is needed.

The number of persons employed in manufacturing increased by 1,500 between 1960 and 1966. About 70 percent of all manufacturing employees work in textiles.

It is significant that between 1958 and 1963 in terms of capital expenditures added by industries that Scotland County's rate of change (608.2 percent) was far greater than all surrounding counties except Hoke. This is the result of an influx of new industries and of expansions by existing textile industries.

Between 1958 and 1963 Scotland and the surrounding counties had experienced a greater rate of changes in value added by manufacturing[1/] than the North Carolina average. Scotland's rate of change was greater than Cumberland (Fayetteville) but was less than that of the other surrounding counties. (See Table 2.)

1/ Value added by manufacturing is defined as the value received for product less the cost of the materials purchased to make the products.

TABLE 2

MANUFACTURING STATISTICS

CAPITAL EXPENDITURES ADDED,
TRENDS FOR SCOTLAND AND SURROUNDING COUNTIES[a/]

County	Capital Expenditures Added 1958 ($000)	Capital Expenditures Added 1963 ($000)	Percent Change
Scotland	183	1296	+608.2
Robeson	1268	2159	70.3
Richmond	1022	2873	181.1
Moore	921	1136	23.3
Hoke	151	1109	634.4
Cumberland	1135	2320	104.4
North Carolina	--	--	86.5

VALUE ADDED BY MANUFACTURING TRENDS FOR
SCOTLAND AND SURROUNDING COUNTIES[a/]

County	Value Added 1958 ($000)	Value Added 1963 ($000)	Percent Change
Scotland	12,238	20,483	+67.4
Robeson	15,213	51,690	+239.8
Richmond	17,585	31,060	+76.6
Moore	11,199	19,164	71.1
Hoke	9,224	18,947	+105.4
Cumberland	20,710	28,471	+37.5
North Carolina	--	--	+49.8

[a/] U. S. Census of Manufacturing, 1958-1963.

AGRICULTURE

The value of farm products sold in 1964 totaled 10.7 million dollars in Scotland County and had increased to 11.1 million dollars by 1966. About 12 percent of all Scotland County employed persons worked in agricultural activities in 1964.

Field crops, specifically cotton, makes up the greater part of all income received from agricultural activities. As a result of acreage controls, income received from cotton has remained stable and is expected to continue in this manner in the future.

Tobacco, like cotton, is regulated by Federal acreage controls. Income received from the sale of tobacco has been decreasing. This trend is expected to continue into the future. Corn and soybeans are two field crops that are increasing in importance. Corn has become more important as a result of the activities of two seed companies (McNair Seed Company and Pioneer Corn). Soybeans are grown on acreage previously used for cotton and tobacco.

The value of vegetable crops has remained rather stable, although there has been some change in the types of vegetables grown.

About one-fourth of the total agricultural income comes from livestock and livestock products. Recent trends indicate increases in income received from livestock and livestock products. Most of the increase was registered by turkeys which are grown in the area. The soils and climate of Scotland County are ideally suited for turkey ranges.

Agricultural trends indicate yields per acre for all crops in Scotland County have increased as a result of more efficient fertilization and disease and insect control, but due to acreage control and mechanization, agricultural employment is decreasing.

The loss of agricultural jobs has slowed considerably (about 2 jobs a year are now lost). The number and acreage of farms has

stabilized as a result of death and migration (there are about 300 full-time farmers in the county now). In addition to full-time farmers, a large number of rural non-farm families live in the county but they add little in terms of agricultural income. (See Appendix Table 1.)

EMPLOYMENT

Employment information is discussed and included in this study because it has a direct bearing on income, population, and sales growth. As an example, ten additional jobs each with an average annual salary of $5,000 could be expected to add approximately $34,000 annually in retail sales and selected services.[1/] A corresponding loss of ten jobs would represent a similar decrease in retail sales.

The future growth of Laurinburg is primarily dependent upon an increase in basic employment that will add new income to the Laurinburg area. Basic employment activities can be defined as those which export goods, services, and capital to individuals or firms whose source of income is from outside the county. Textile mills are examples of basic industries. St. Andrews College also plays the role of a basic industry. All of the new industries added since 1960 are basic industries. Major manufacturing establishments shown on Table 1 are also basic industries. (See Appendix Table 2.)

Nonbasic activities, on the other hand, include those which operate as an economic complement to basic ones. Non-basic activities sell their goods and services to the local population, for example, retail trade establishments of the city that sell goods to the trade area.

The primary basic employment categories of the county are as follows:

(1) Textile and Yarn Manufacturing
Springs Mills (4 plants), Waverly Mills (3 plants), Morgan Mills (1 plant), Fieldcrest Mills (1 plant), and Dixiana Mills (1 plant). These industries produce

---

1/ Estimated by applying the state ratio of .67 of total personal income in North Carolina (U. S. Census of Population) spent for retail sales and selected services (U. S. Census of Business). Computed by dividing income by sales and selected services.

tire cord, bedspreads, dish cloths, towels, cotton-synthetic yarn, cotton and synthetic fabrics. (Five of the ten plants are located within the planning area.)

(2) Agricultural Employment
The growing of cotton, soybeans, corn, turkeys, livestock and livestock products, and tobacco.

(3) Durable Manufacturing
Ingraham Company (timing devices), Laurinburg Plywood, Ritz Craft Industry (mobile homes), Woodard Craft (furniture), Johns-Manville, REA Magnet Wire, and Sinclair Lumber. (Three of the seven plants are located within the planning area.)

(4) Agri-Business Industries
Pioneer Seed Corn, Luter Meat Distribution, McNair Seed Company, Laurinburg Milling (flour), and Dixie Guano (fertilizer). (Three of the five plants are located within the planning area.)

If past trends are projected, it would indicate sizeable increases in employment in manufacturing, services, commerce and transportation, communications, and utility services. Employment in agriculture and construction is expected to level off. For trends from 1950 to 1960 by residence of the employee, see Appendix Table 3. Appendix Table 4 shows trends since 1960 by place of employment. Appendix Table 3 shows the number of employed persons living in the county. Appendix Table 4 shows the number of persons working in the county who live in the county or who commute from surrounding counties.

To provide for the increase expected in the county population, about 1,400 new jobs will be needed by 1987. A net increase of 70 new jobs must be added each year to accommodate the growth in county population.

Jobs in the county are sometimes filled by workers from adjacent counties and vice versa. One hundred and thirty-one more people commuted into the county than out of it to work in 1960. Most of the workers who commute into the county are from Marlboro County, South Carolina; Richmond and Robeson Counties, North Carolina. This indicates there are more opportunities for

employment in Scotland County than there are in surrounding counties.

In terms of wage and salary workers, manufacturing supplied 71 percent of the total wages paid in 1966. This is followed by trade employment which accounts for about 16 percent of the total. (See Table 3.)

TABLE 3

SCOTLAND COUNTY INSURED EMPLOYMENT AND WAGES BY BROAD INDUSTRY GROUPS FOR 1966 (AVERAGE)[a]/

	Employment	Total Wages	% of Total Wages
Construction	165	$ 601,925	2.2
Manufacturing	4,707	19,283,937	71.2
Trans., Comm., & Utilities	276	1,260,630	4.7
Trade	1,192	4,188,322	15.5
Finance, Ins., & Real Estate	258	1,107,952	4.1
Service	231	627,896	2.3
	6,829	$27,070,662	100.0

[ ] Substantial % of the total.

a/ Source: N. C. Employment Security Commission. Not included in these figures are employees in agriculture; domestic work; governmental service; religious, charitable, or nonprofit organization work; interstate railroad employees; unpaid family workers; sales employees; and those workers for employers with less than four workers.

EDUCATION

Table 4 gives an idea of the educational backgrounds of Laurinburg residents and compares them with urban North Carolina figures. The figures suggest that, in the face of the rising educational demands of modern economic activities, some local residents will find it difficult to achieve and maintain economic security. The median number of school years completed by Laurinburg residents age 25 and over was 9.0 years, compared with 10.4 years for the urban North Carolina average.

White residents are better educated than nonwhite residents. The nonwhite population includes 12.3 percent with no schooling compared with 3.7 percent of the white population. It is significant of the 91 nonwhite persons who attend college most of them completed 4 or more years of college. Just the reverse was true of the white population. The lower education level of the nonwhite population is reflected in the lower income received by nonwhites.

Although the holding power of schools has improved, student dropouts and unskilled labor are still a problem in the county. It would be to the city's advantage to upgrade the education and skills of the labor force by encouraging students to complete high school and encouraging unskilled workers to attend adult education classes and technical training classes.

A low educational level is followed by low income, poor housing, a lack of self respect and immoral conduct by the individual. The net result is more tax dollars are needed to provide adequate housing, provide adequate police service, etc.

TABLE 4

YEARS OF SCHOOL COMPLETED BY LAURINBURG CITY POPULATION - AGE 25 AND OVER, 1960[a/]

	Laurinburg						Urban N. C.
	White		Non-White		All Races Total		
	No.	% of Total	No.	% of Total	No.	% of Total	% of Total
Population Age 25 and Over	2,629	100.0	1,394	100.0	4,023	100.0	
Years of School Completed							
0 years	99	3.7	172	12.3	271	6.7	2.5
Elem. 1-4	271	10.4	318	22.8	589	14.6	10.6
5-7	391	14.9	448	32.2	839	20.9	19.9
8	198	7.5	123	8.9	321	8.0	8.8
High 9-11	473	17.9	176	12.6	649	16.1	17.4
12	670	25.5	66	4.7	736	18.3	20.9
College 1-3	289	11.0	29	2.1	318	7.9	10.2
4 or more	238	9.1	62	4.4	300	7.5	9.7
Median Years Completed			6.4		9.0		10.4

[a/] U. S. Census of Population, 1960.

INCOME

Table 5 shows income distribution by family in the city, county, and in urban North Carolina.

The city per capita income is $251 greater than the county average. When compared to nearby cities, the per capita city personal income is lower than that found in Lumberton or Rockingham.

In 1959 Scotland County's per capita income was lower than the averages for the nation, state, and adjacent counties except Robeson and Hoke.

The low county income is related to the high nonwhite population. The per capita white income was $1,227, compared with $372 for the nonwhite population. Scotland County's per capita income has increased more rapidly than all adjacent counties except Moore and Hoke. This is the result of an out-migration of low income families and an increase in manufacturing employment.

The percentage distribution of family income is an important consideration. The percent of Laurinburg families earning under $3,000 annually is greater than in urban North Carolina. Similarly, the city has a lower percent of families earning over $8,000.

In 1959, Scotland County also had a greater number of families than adjacent counties, except Richmond, that earned less than $3,000. Of the families in this low income group, 81.9 percent were nonwhite, only 18.6 percent were white.

As a result of manufacturing employment added since 1960, the per capita income in Laurinburg and in Scotland County compares more favorably now with surrounding cities and counties. Although U. S. Census income information will not be available until 1970, increases in retail sales and services in Scotland County since 1960 have exceeded all surrounding counties

indicating income is also increasing more rapidly (North Carolina average indicates .67 percent of income is spent for retail sales and services).

Another indication of increases in per capita income was revealed by a study completed in 1962 by the N. C. Department of Tax Research which indicates the county per capita income had increased by $460 in three years (from $850 in 1959 to $1,310 in 1962). The $1,310 per capita income compared with a state average of $1,732. This would indicate a county per capita income that is but $189 short of the state average.

In addition the total income in Scotland County rose from 21.4 million dollars to 33.0 million dollars (a 11.6 million dollar increase in three years).

TABLE 5

COMPARISON OF 1959 INCOME DISTRIBUTION BY FAMILY

Income Group	Laurinburg % of Total Income	Scotland County % of Total Income	Urban N. C. % of Total Income
Under $3,000	23.4	24.3	7.8
$3,000 - $7,999	54.7	57.2	49.4
$8,000 and over	21.9	18.5	44.8
Per Family	4,406	3,739	5,913
Per Capita	1,101	850	1,543
Total Personal Income ($000)	9,076	21,403	--

Source: U. S. Census of Population, 1960.

COMMERCE

Commerce will be discussed in terms of retail trade, services, and wholesale trade.

RETAIL TRADE

Retail sales information from the 1963 U. S. Census of Business indicates a very favorable rate of retail sales growth occurred in Laurinburg between 1958 and 1963, increasing by 73 percent compared with 50 percent for Scotland County (a .1 percent increase for the county area outside Laurinburg). City sales included 19.7 million dollars of the 25.0 million dollar county total. The impact of adding St. Andrews College and the new industries added in the county is reflected in the rapid growth rate. (See Table 6.)

Laurinburg's rate of increase was compared with Lumberton, Rockingham, and Fayetteville. The percent change in Laurinburg between 1958-63 was about the same as Lumberton but was about twice that of Rockingham and Fayetteville.

Retail sales in Scotland County are compared with surrounding counties on Table 6 also. The rate of retail sales is increasing more rapidly in Scotland County (50 percent) than in all surrounding counties except Robeson (51 percent).

These Laurinburg and Scotland County figures reflect a healthy growth trend as a result of industrial growth and increased income added since 1960. If the industrial growth trends continue, increases in retail sales will follow.

There has been a significant shift in the distribution of retail sales establishments in the City of Laurinburg during the past 15 years. Most vehicle oriented business establishments had parking and traffic problems downtown and have since relocated to North or South Main Street or to bypass 401-15 (includes auto

sales, tire sales, gas stations, etc.). In addition to those establishments that have relocated, many new establishments that have been added during the past 15 years located on South Main Street. The exit of trade and service establishments that are oriented to vehicles trade was needed to relieve downtown streets and parking areas of congestion.

Many downtown buildings and parking areas are in a poor condition. Some of the businesses have survived because they obtain some walk-in trade that is attracted downtown by the more progressive merchants. A major question that will have to be answered in the next few years is: can a few progressive merchants provide the spark that is needed to keep the downtown healthy? Without improving the parking areas, buildings, and appearance of the downtown, how competitive is Laurinburg in comparison to surrounding cities? If the more progressive merchants relocated to a shopping center, the net results would be the complete deterioration of the Central Business District.

TABLE 6

RETAIL SALES TRENDS FOR SCOTLAND AND SURROUNDING COUNTIES[a/]

	Total Retail Sales			Percent Change	
	1954 ($000)	1958 ($000)	1963 ($000)	1954-58	1958-63
Scotland	15,234	16,702	24,994	9.6	49.6
Laurinburg		11,420	19,698		72.5
Robeson	55,099	54,970	82,876	1.6	50.8
Lumberton		23,573	40,735		72.8
Richmond	28,905	34,443	39,681	19.0	15.2
Rockingham		19,165	25,872		35.0
Moore	25,213	30,362	39,390	20.4	29.7
Hoke	5,638	6,283	8,498	11.4	35.3
Cumberland	99,843	114,241	169,443	14.4	48.3
Fayetteville		92,847	123,251	--	32.7

[a/] U. S. Census of Business.

SERVICES[1/]

Selected services sales in Scotland County totaled $1,977,000 in 1963. The county's rate of increase (119 percent) was almost twice that of surrounding counties. Most of the increase in services registered by the county were added in Laurinburg (lodging and business services added). (See Table 7.)

The addition of St. Andrew's College and of several new industrial plants has resulted in total service sales in Laurinburg more than doubling between 1958 and 1963. It is estimated that amusement and automobile repair and services accounted for much of the increase.

People are enjoying more of the good things of life as a result of increased incomes. This has resulted in significant increases in services sales both locally, statewide, and nationally for recreation, travel, and motels. This trend is expected to continue into the future. It is reflected in Laurinburg by two new motels, new gas stations, and by several automobile dealers that have constructed new facilities.

[1/] Selected services as defined by the U. S. Census of Business includes hotels, rooming houses, camps, and other lodging places; personal services; miscellaneous business services; automobile repair; automobile service and garages; miscellaneous repair services; motion pictures, amusement, and related services.

TABLE 7

SELECTED SERVICES TRENDS FOR
SCOTLAND AND SURROUNDING COUNTIES[a/]

	Total Service Sales			Percent Change	
	1954 ($000)	1958 ($000)	1963 ($000)	1954-58	1958-63
Scotland	873	901	1,977	3.2	119.4
Laurinburg		624	1,480		137.2
Robeson	2,683	3,533	5,272	31.7	49.2
Lumberton		1,567	3,184		103.2
Richmond	1,791	2,751	3,219	53.6	17.0
Rockingham		1,291	1,738		34.6
Moore	3,993	5,267	7,144	31.9	35.6
Hoke	196	565	442	188.3	-21.8
Cumberland	11,237	13,225	20,025	17.7	54.4
Fayetteville		8,877	13,854		56.1

[a/] U. S. Census of Business.

WHOLESALE TRADE[1/]

Establishments engaged in wholesale trade in Scotland County are located both in Laurinburg and in the fringe area.

It is apparent that existing wholesaling establishments in Laurinburg are moving to the fringe area where traffic congestion and parking are not a problem. With healthy increases in retail sales, increases in wholesaling activities will follow. Trends for Scotland County were compared with surrounding counties on Table 8. The rate of increase of Scotland County between 1958-63 compares favorably with surrounding counties. Much of the wholesaling activities that serve the surrounding counties have concentrated in the larger communities: Lumberton (Robeson County) and in Fayetteville (Cumberland County).

1/ Wholesale activities as defined by the U. S. Census of Business include the following: motor vehicles; automotive equipment; drugs; chemicals, and allied products; dry goods; apparel; groceries and related products; farm products; raw materials; electrical goods; hardware; plumbing and heating equipment and supplies; machinery equipment and supplies; metals; minerals; petroleum bulk station; terminal; scrap and waste materials; manufactured tobacco products; beer, wine, distilled alcoholic beverages; paper and paper products, except wallpaper; furniture; home furnishings; lumber, construction materials; miscellaneous products.

TABLE 8

WHOLESALE TRADE TRENDS FOR SCOTLAND AND SURROUNDING COUNTIES[a/]

	Total Wholesale Trade			Percent Change	
	1954 ($000)	1958 ($000)	1963 ($000)	1954-58	1958-63
Scotland	16,063	11,412	18,489	-29.0	62.0
Laurinburg		5,135	8,953		74.4
Robeson	63,959	55,189	62,944	-12.2	14.1
Lumberton		31,663	42,805		35.2
Richmond	8,688	8,981	20,945	3.4	133.2
Rockingham			12,030		
Moore	13,190	13,453	13,358	2.0	-0.7
Hoke	--	414	835	--	101.7
Cumberland	48,295	54,887	81,401	13.6	48.3
Fayetteville		37,946	75,938		100.1

[a/] U. S. Census of Business.

ECONOMIC POTENTIAL AND RECOMMENDATIONS

The success of efforts to improve the living conditions of people in Laurinburg is dependent upon a strong community economic base. The Laurinburg Planning Board has a major responsibility for strengthening the economic base of the community through its recommendations to the City Council and to other boards. Examples of recommendations the Planning Board can make to the City Council include protection of usable industrial land by use of the zoning ordinance; encouraging compact development with the zoning ordinance that can be economically served by utilities; and requiring adequate standards of development for new residential areas through enforcement of the subdivision regulations.

The development of a well planned city will provide for more compatibility between land uses. It will also insure adequate levels of sewer and water service, etc., at reasonable tax rates to the citizens. Without sufficient growth in the community's economic base, there can be no progress in improving the standards of living of citizens in the community.

Laurinburg has many advantages that encourage economic development. It also has several disadvantages that discourage economic development. Fortunately, some of the disadvantages can be overcome. The following are some of the major advantages and disadvantages that were listed in the survey answered by businessmen and industrialists of the community.

Major Advantages of the Laurinburg Area

1. Mild climate.
2. Ample rail service (served by Seaboard Airline Railroad and Laurinburg Southern Railroad).
3. Ample highways (U. S. 15, 501, and 401, north-south highways,

and U. S. 74, east-west highway. U. S. 74 links Laurinburg with Interstate Highway 95 at a point 32 miles to the east, this highway also links Wilmington with Charlotte).

4. Adequate airports (Laurinburg-Maxton Airport is located approximately 6 miles to the east, Fayetteville Airport 42 miles to the northeast, Lumberton Airport 32 miles to the east, and Florence, South Carolina, Airport 58 miles to the south).
5. Sufficient electric power (city power system, outlying areas are served by Carolina Power and Light Company or by the Lumber River Electric Cooperation).
6. Adequate fire and police protection (the city has a National Bureau of Fire Insurance Underwriters rating of six and a very low crime rate).
7. Sound and stable government.

   City - City manager, mayor-council form of government
   County - County manager-commissioners form of government
8. Favorable business climate and helpful community attitude toward new industry.
9. Reasonable tax rate.
10. Right to work law in state (non-union area).
11. An active Chamber of Commerce.
12. An active Planning Board.
13. Higher educational facilities and cultural facilities available (St. Andrews College located in Laurinburg).
14. Natural resources, sand available.
15. Natural resources, soils (soils in the southern portion of the county are generally fertile and suitable for growing row crops including tobacco, corn, soybeans, vegetables, tobacco, etc.).
16. Natural resources, timber (about 53 percent of the county is in commercial forest) that includes the Sandhills Game Management area located in the north end of the county.

17. Natural resources in water, both surface and subsurface sources. The Lumber River is located 5½ miles to the east; it has a minimum flow of 65 million gallons and an average flow of 600 million gallons per day (U. S. Geological Survey 35 year stream gauge records at Lumberton).
18. Ample labor supply available.
19. Ample city services available (water and sewer service).
20. Good banking facilities.
21. Adequate community facilities (new library, new senior high school, etc.).

Major Disadvantages of the Laurinburg Area

1. Low income level due to low educational level of some of the population.
2. Losing retail trade to other more aggressive urban centers (poor appearance of downtown buildings, inadequately improved parking facilities, not enough selection of dry goods merchandise, not enough amusement establishments, etc.).
3. Lack of public support for cultural improvements (public apathy toward some community improvements).
4. Poor postal service.

Recommendations

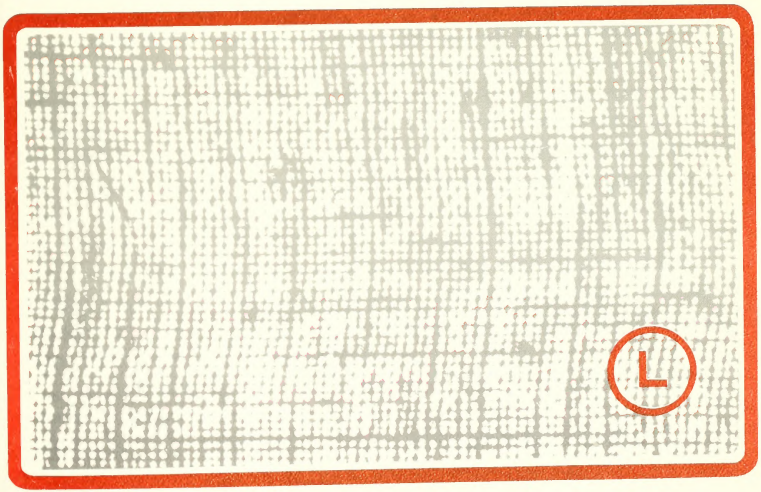
Continued emphasis on attracting more diversified industries is needed. Although Laurinburg has the opportunity to attract an endless variety of industries, because of its resources and geographic location, it stands a better chance of attracting certain types of industries. Fabrication types of manufacturing establishments that mold or assemble a product, for example, are good prospects. Other examples of the many types of industry

Laurinburg has a chance of attracting include metal products fabrication (small motors, garden tractors, machine parts, farm equipment, etc.), assembling of household appliances, office and school equipment, electrical machinery assembly, textile manufacturing, etc.

Industries that manufacture a product which is now or will in the future be distributed to the growing southern market or that manufacture a product that can be transported cheaply to the eastern market offer good prospects.

Industrial development depends on a number of factors such as available raw materials, labor, site, transportation facilities, fuel, power, market, etc., which in the proper combination enable the right combination of factors for the right business a community has a good possibility of succeeding in attracting such industry. However, often there are many communities that have the right combination of facilities and it becomes a matter of selecting one in which to locate. Competition among states and cities is keen. The cities having the most success in economic development are those that are organized. The support of business and industrial organizations is needed for the city to increase its economic base.

POPULATION



POPULATION TRENDS AND PROJECTIONS

Growth in population is usually preceded by economic development. Past and future trends in both population and economic growth were considered in projecting the future population. The characteristics of the population were also analyzed because of their importance to the city.

Laurinburg

Incorporated in 1877, Laurinburg has grown rapidly, especially during the decades of 1900-1910 and 1930-1940. (See Appendix Table 6.) Based on the growth trends to 1960, the prospects of several annexations and the estimated future college resident population, the projected 1970, 1980, and 1987 population is indicated below:

9,700 in 1970, 14,100 in 1980, and 15,400 in 1987

Annexations to the city in the 1950's and 1960's accounted for most of the increase in city population. There has been a trend in the community for people to vacate older housing within the corporate limits and move to new subdivisions in the fringe area where large vacant lots are available. Thus, the population growth which is taking place is being added outside the corporate limits. Much of this growth, however, has not yet been annexed to the city. In order to keep up with this outward movement of the population, an acceleration in annexation is needed; the Past and Projected Annexation Growth Map indicates areas that should be considered.

In annexing new areas, considerations other than increasing the Laurinburg population are involved, such as: could Laurinburg finance utility extensions, etc. Until the city's new sewer treatment plant and several major sewer outfall lines are

constructed, no major annexation by the city is recommended. Because of this, the city's population has been projected at 9,700 in 1970 instead of the previous 10,700 which was projected in the Central Business District Study. It is anticipated several large annexations will occur in the 1970's and that the previous projection (14,000) will be about right for 1980 (14,100). (See Table 9 and Appendix Table 5.)

Information on the population migration from Laurinburg is not available. Scotland County's migration is indicated in Appendix Table 6. (6,653 people migrated from the county between 1950-60.) Most of the out-migration was by the nonwhite population. Natural increases in the population indicates 5,500 births in excess of deaths.

Scotland County

Formed in 1899, the county's most rapid population growth occurred while agriculture was predominant -- in the decades 1900-1910 and 1920-1930. Since 1920, migration from rural areas to urban areas has been evident. The population of Scotland County was 67 percent rural in 1960. The growth of Scotland County's lone urban area, Laurinburg, has not offset the overall county population decline.

If we assume conditions that existed from 1950 to 1960 will continue unabated, a decline in county population will result. Three factors, however, are expected to change this trend: the growth of St. Andrews College, the addition of new industrial jobs, and a decrease in out-migration by the rural population (the farm population has stabilized since 1960).

In addition to the rise in population generated by St. Andrews College, employment trends since 1960 (Appendix Table 4) indicate that some population growth, generated by more industrial employment, has occurred.

TABLE 9

LAURINBURG POPULATION PROJECTIONS[d]

	1950	1960	1967	1970	1980	1987
Population Count of Previous Decade	7,134	7,134	8,242	9,400	9,700	14,100
Population Added Within Corporate Limits	--	79	99	--	--	--
Population Added By Annexations[c]	--	1,029	150[c]	--	3,100	700
Population Added By Merging Laurinburg and East Laurinburg					700	
College Resident Population Added[a]	--	--	900[b]	300[b]	600[b]	600[b]
TOTAL	7,134	8,242	9,391	9,700	14,100	15,400

	1960	1967	Increase	1987
Laurinburg	8,242	9,391	+6,909	15,400
East Laurinburg	695	695	--	--[e]
Unincorporated Part of The Planning Area		5,053[g]		3,200
Total Planning Area		15,149	+4,451	19,600
Scotland County	25,183	26,191[f]	+3,909	30,100[f]

[a] St. Andrews College opened in 1961.

[b] Existing and projected college resident population by St. Andrews Business Office.

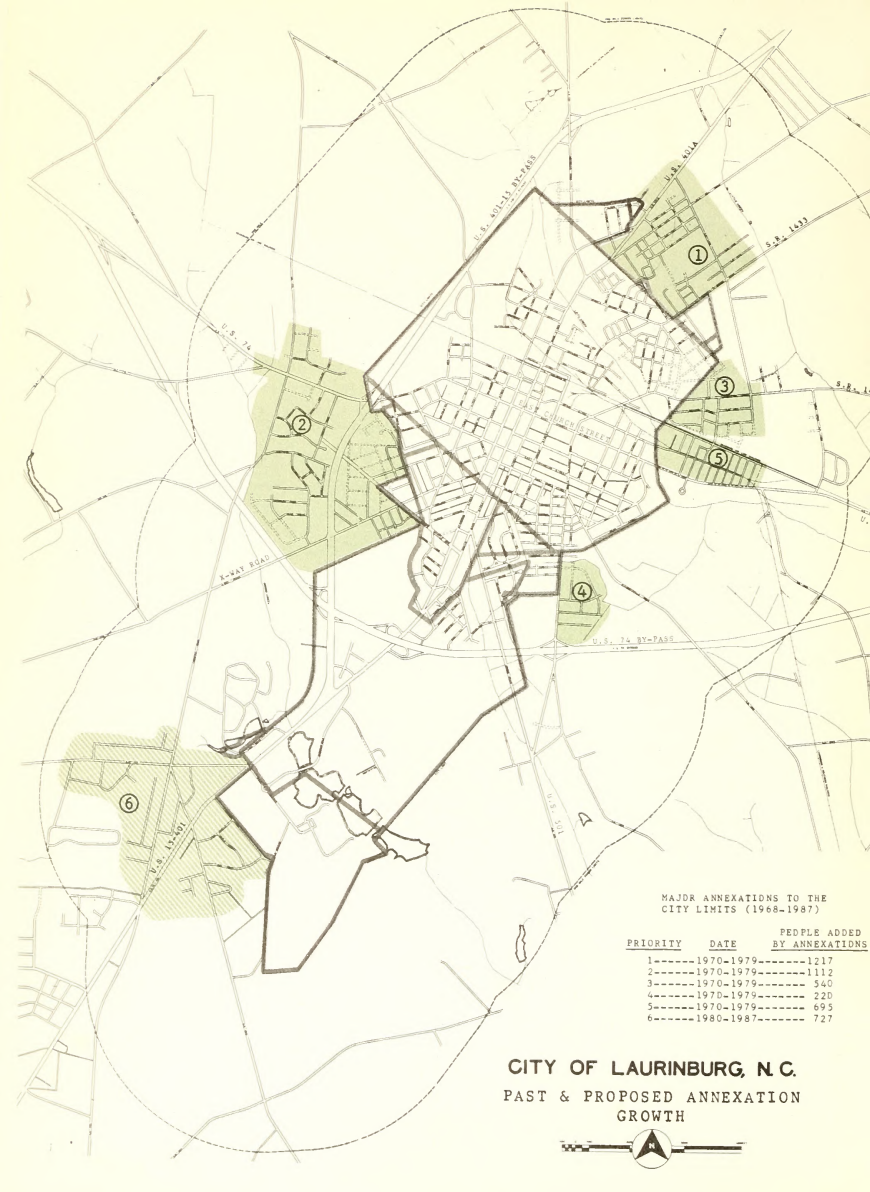
[c] See Past and Projected Annexation Growth Map.

[d] The estimated 1967 population based on a Division of Community Planning household count times the average number of persons per household in 1960 (3.6); projections by the Division of Community Planning.

[e] Merged with Laurinburg.

[f] Estimated 1967 population and projections by the Division of Community Planning, using recent trends in mortality and some adjustment in out-migration due to increased employment opportunities added in the county since 1960.

[g] Based on household count times 3.6 persons per household.



MAJOR ANNEXATIONS TO THE CITY LIMITS (1968-1987)

PRIORITY	DATE	PEOPLE ADDED BY ANNEXATIONS
1	1970-1979	1217
2	1970-1979	1112
3	1970-1979	540
4	1970-1979	220
5	1970-1979	695
6	1980-1987	727

CITY OF LAURINBURG, N. C.

PAST & PROPOSED ANNEXATION GROWTH

Projections for the city, county, and planning area are included on Table 9.

AGE AND RACE COMPOSITION OF THE POPULATION

In relationship to the total population, a decrease was registered from 1950 to 1960 for the most productive age segment of the city population, the group from 20 to 39, indicating an out-migration of the labor group. A similar reduction took place for the same segment of the county population. On the other hand, the part of the city population under 19 and over 40 increased. Older people tend to remain since they are already established and because employment opportunities elsewhere are not as favorable as for younger people. (See Table 10.)

Due to agricultural employment losses, the nonwhite segment of the county (1950-60) decreased from 47.8 to 44.3 percent. Nevertheless, the percentage of nonwhite population in both Laurinburg and Scotland County remains greater than that of the state.

Most of the (4.4 percent) decrease in county population from 1950 to 1960 was accounted for by the nonwhite group. It is estimated that 67 percent of those migrating from the county were nonwhites. In this period, the white population increased by 2.2 percent, thus causing considerable change in the racial composition of the county population.

TABLE 10

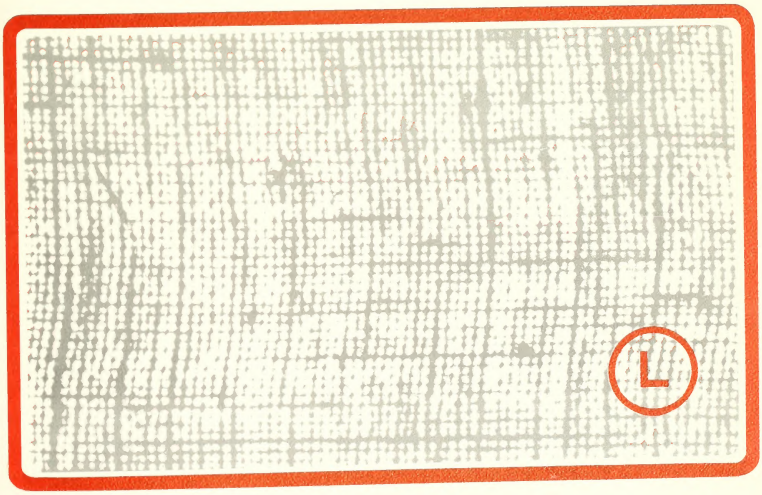
LAURINBURG AND SCOTLAND COUNTY
AGE COMPOSITION OF THE POPULATION[1/]

	Laurinburg				Scotland County			
			% of Total				% of Total	
Age Group	1950	1960	1950	1960	1950	1960	1950	1960
Under 9	1,690	2,058	23.8	24.9	7,330	6,611	27.8	26.3
10-19	1,163	1,681	16.3	20.4	5,105	5,799	19.4	23.0
20-29	1,211	881	16.9	10.7	4,181	2,337	15.9	10.1
30-39	1,182	1,083	16.6	13.2	3,638	3,055	13.8	12.1
40-49	813	1,029	11.4	12.4	2,547	2,929	9.7	11.6
50-59	534	697	7.5	8.5	1,687	2,023	6.4	8.0
Over 60	541	813	7.5	9.9	1,848	2,229	7.0	8.9
	7,134	8,242	100.0	100.0	26,336	25,183	100.0	100.0
% Nonwhite	38.4	39.6			47.8	44.3		

[1/] U. S. Census of Population.

LAND USE SURVEY & ANALYSIS

PART II



AREAS TO BE DISCUSSED

The four areas for which information has been assembled for this portion of the report are shown on the Planning Area Map. The reasons these areas are discussed are given below.

1) City of Laurinburg: This includes only the area located within the city limits of Laurinburg. This area is of special concern to the citizens and to the governing body because the citizens therein have special powers for providing public services, taxing and governing their fellow citizens. The boundary of this area is cited as June 30, 1967. However, the city limits can be extended by annexations.

2) Town of East Laurinburg: This is the area within the town limits of East Laurinburg. As this is a legally incorporated entity separate and apart from Laurinburg, the citizens of Laurinburg and their governing body have no powers or control over this community.

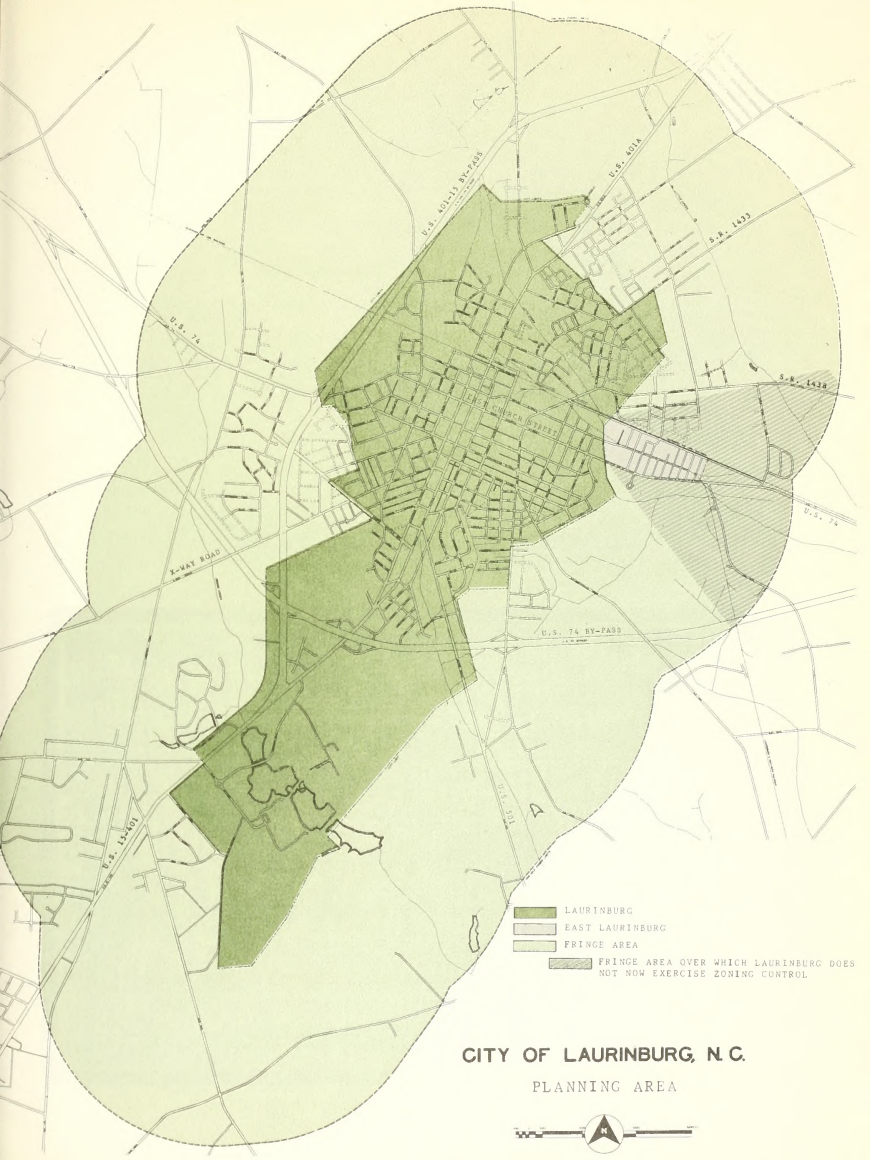
3) Fringe Area: The one-mile area that extends from the corporate limits of Laurinburg in all directions, but excluding the incorporated area of East Laurinburg. The zoning and subdivision jurisdiction of Laurinburg now stops at a boundary line equidistant between the corporate limits of Laurinburg and East Laurinburg. This boundary line meets the requirements of GS 160-101.2 but leaves a pie shaped area to the east of East Laurinburg over which no land use control is exercised. East Laurinburg does not now exercise its zoning or subdivision authority and does not have the authority to zone or control development within one mile of its corporate limits. During the 1965 Legislature, Chaper 864 was adopted which permits towns that have overlapping

one mile jurisdictions to adopt ordinances agreeing to a different boundary line. East Laurinburg could therefore adopt an ordinance which would permit Laurinburg to exercise zoning control in the total fringe area including all of the land within one mile of Laurinburg but excluding the corporate limits of East Laurinburg. This zoning control is needed now. The one-mile area has special meaning for planning activities because the city could enforce its zoning ordinance within the area. There are a number of reasons to devote special attention to this one-mile area.

1) It will be the site of a large portion of the development that will be annexed to the city during the next twenty years, development which should be guided by regulations in the public interest.

2) Development added in this fringe area will be dense and of urban character requiring urban services from the city.

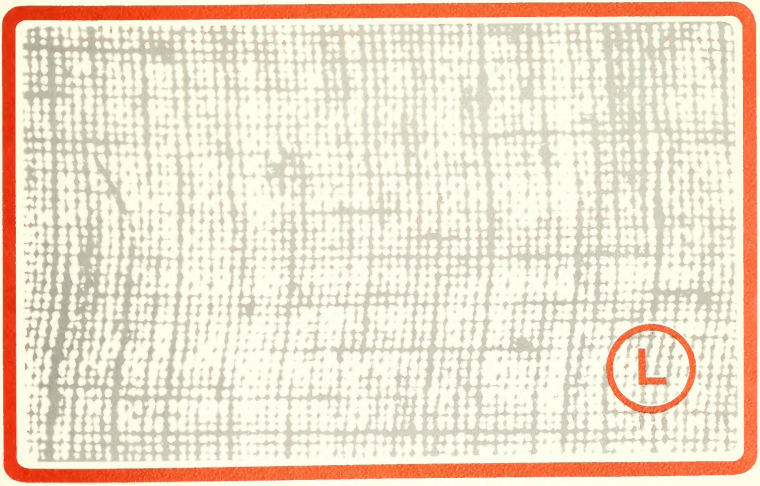
4) Planning Area: This term is used to refer to both the corporate limits of Laurinburg and the one-mile fringe area. It also includes the incorporated area of East Laurinburg.



CITY OF LAURINBURG, N. C.

PLANNING AREA

LOCATION AND HISTORY OF DEVELOPMENT



LOCATION AND HISTORY OF DEVELOPMENT

Laurinburg, the county seat of Scotland County, is located in the southeastern section of the state approximately equal distance from Charlotte and Raleigh as indicated on the Regional Population and Setting Map.

Settlements began as early as 1785 in the Laurinburg area with the opening of the James R. McLaurin General Store, but little growth occurred until an academy was built. Incorporated in 1877 as Laurinburg, the city had a population of 908[1/] by 1880.

The early economy of the area was based on cattle and sheep; however, early in the nineteenth century, turpentine began to replace livestock as the chief source of income. Lumber activities followed. After the Civil War, cotton became and remains the major money crop. In 1867 the first textile plant was built; other textile plants ensued. Textile mills are still the principal employer of the county with four large corporations now managing them.

The first railroad had been constructed by 1861. As the automobile became popular, two major highways were hard surfaced through Laurinburg.

New Growth (Structures Added)

Major concentrations of residential, commercial, public and semipublic, or industrial structures added within the planning area since 1945 are shown on the New Growth Map.

As a result of Bypass 401-15 and St. Andrews College being added, the largest number of new residential structures have been built to the south and west of St. Andrews College.

[1/] U. S. Census of Population.

Concentrations of residential structures were added to the south in the following subdivisions: Hammond Heights, Southmoor, College Park, Macland and Lakewood Hills. Added to the west of the city are Westover, West Land, Scotsdale, Westwood and McLaurin Acres subdivisions which are now completely developed with residences. Subdivisions added to the north include Lincoln Heights, Northside, and Sanfordville.

Along South Main Street, a concentration of commercial structures have been added (automobile sales establishments, service stations, drive-in restaurants, and tire sales establishments). Some of these establishments are new and serve the college trade; others relocated from the Central Business District to obtain space for off-street parking and better access to the bypass.

Further to the south (where U. S. 401-15 Bypasses intersect with South Main Street), two motels have been added.

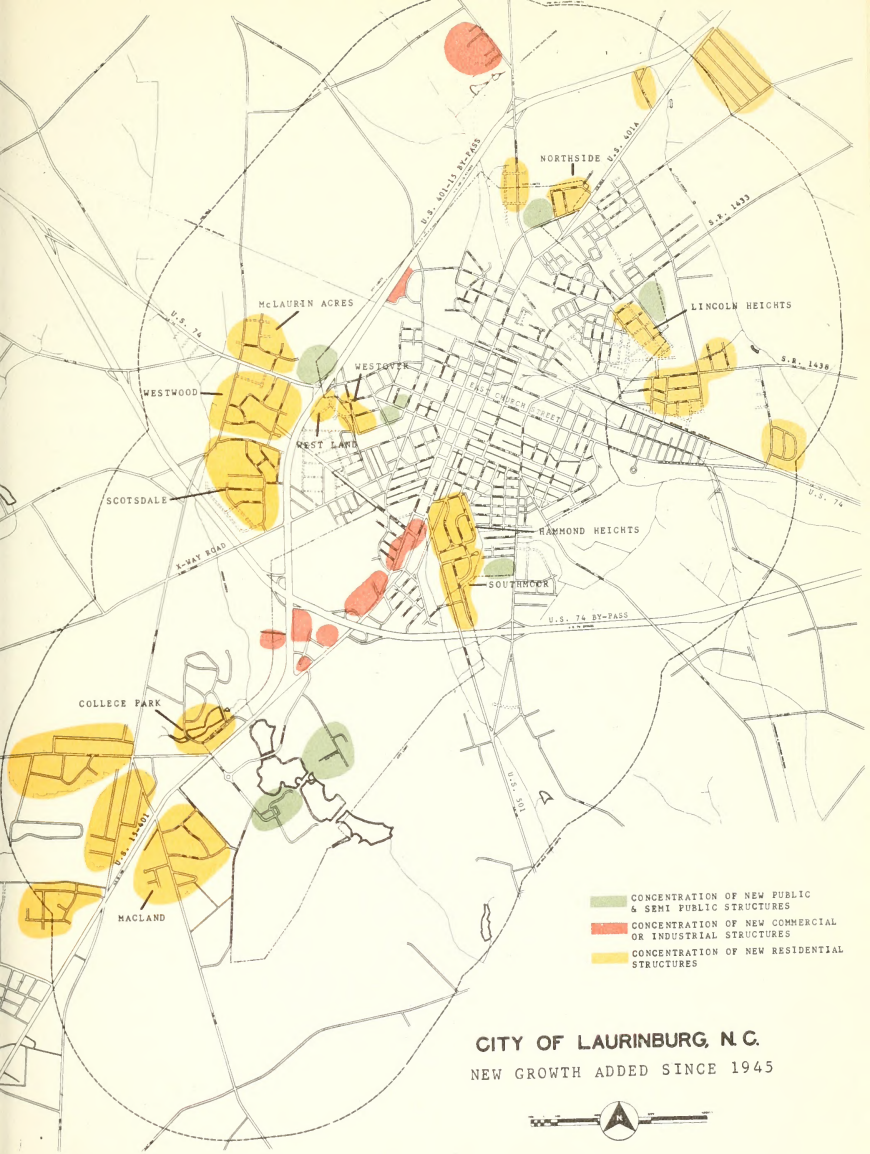
Considerable industrial growth has taken place but most of it has located in the county outside the planning area. However, two large industrial plants were constructed within the planning area to the north of the city on SR 1301 (REA Magnet Wire and Ingraham Watch Company).

Concentrations of public and semipublic structures added are included on the St. Andrews College campus, in the Scotland County High School campus, Scotland County Memorial Hospital site, etc.

New Growth (Annexations)

At the time of incorporation in 1877, the Seaboard Airline Railroad divided the town in half, and the present Central Business District was located in the geographic center of the city.

No major annexations were made to the city for the first sixty-two years. In 1939 Quinn Marshall subdivision was annexed by the city. In the intervening years, almost all of the



CITY OF LAURINBURG, N. C.

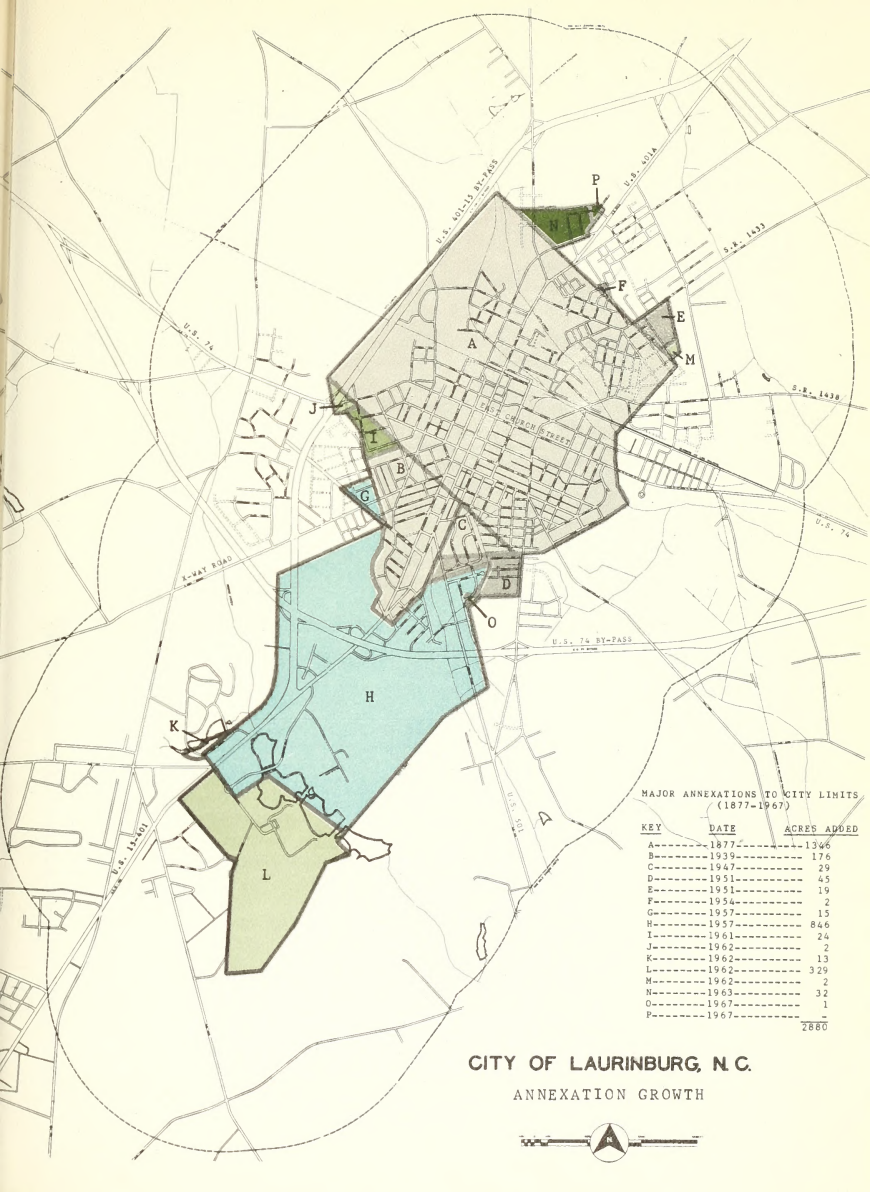
NEW GROWTH ADDED SINCE 1945

SOURCE: DISCUSSION WITH THE BUILDING INSPECTOR

annexation growth has been to the southwest. The Hammond Heights subdivision was added to the city in 1947.

During the 1950's and 1960's, the number and size of annexations increased considerably. There were five annexations added in the 1950's increasing the population by 1,029 people. The 1957 annexations added the St. Andrews College area.

In the first 7 years of the 1960's, eight annexations took place. Census data is not available as to the number of people added by these annexations, but present house counts for the areas annexed suggest probably less than 150 people were included. There was one sizable area of St. Andrews College annexed to the city; other annexations included only small areas. See Annexation Growth Map.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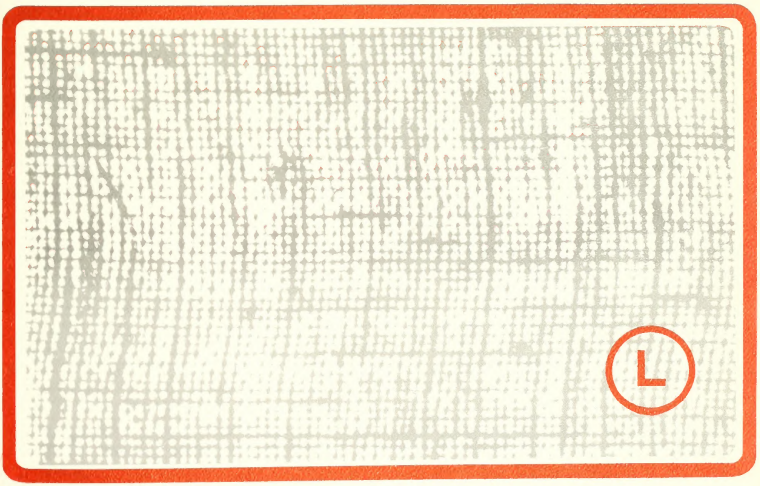
U.S. 401 BY-PASS
U.S. 401A
S.R. 1433
S.R. 1438
U.S. 74
A-WAY ROAD
U.S. 74 BY-PASS
U.S. 401
MAJOR ANNEXATIONS TO CITY LIMITS
(1877-1967)
KEY DATE ACRES ADDED
A 1877 1346
B 1939 176
C 1947 29
D 1951 45
E 1951 19
F 1954 2
G 1957 15
H 1957 846
I 1961 24
J 1962 2
K 1962 13
L 1962 329
M 1962 2
N 1963 32
O 1967 1
P 1967 -
2880
CITY OF LAURINBURG, N.C.
ANNEXATION GROWTH

NATURAL FEATURES



NATURAL FEATURES

Future development in the Laurinburg Planning Area will be influenced to some degree by natural features, much as it has in the past. The two most significant natural features in Laurinburg that have either encouraged or discouraged urban development are drainage and soils. There are numerous other natural features that affect urban development but such factors are not prevalent in the Laurinburg area.

TOPOGRAPHY AND DRAINAGE[1/]

Topography - The topography of the Laurinburg Planning Area is flat to slightly rolling. Elevations vary (50 feet) from 190 feet above mean sea level at the sewage treatment plant on Leiths Creek to 240 feet at the northwestern extreme of the planning area. Slopes are gentle for the most part and have not affected the existing land use pattern. For example, very little site grading is generally required when residential, commercial, or industrial structures are added.

High land within the corporate limits is found in the northwestern quadrant of the city (Middleton Heights) and in the Central Business District. With the exception of the flood plains of Big Branch, Leiths Creek and Bridge Creek, elevations within the incorporated area vary only by approximately ten feet.

There are numerous Carolina bays (oblong depressions in the earth) located south of Church Street in the corporate limits. One bay includes Norman Heights, Westwood, West Land, and Westover subdivisions, one bay the hospital vicinity, one bay the Mel

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1/ Source: U. S. Geological Survey quadrangle sheets, 1957; and City Topography Map by W. E. Matthews Company, Eng., May 27, 1960.

Rose subdivision area, and one bay the Southmoor subdivision. See Soil Suitability Map.

Similar Carolina bays are located in the fringe area as follows: three large bays to the southeast of the corporate limits between Leiths Creek and South Caledonia Road, two large bays to the northwest of the corporate limits and west of Bypass U. S. 401-15 and SR 1116, and two large bays to the east of St. Andrews College. Smaller bays are too numerous to discuss; they can be seen on the Soil Suitability Map. Bay areas are depressions in the earth's surface and generally their soils are not as well drained as other soil areas and are not as well suited for urban type development.

Drainage - Storm run-off in the planning area is channeled into one of four creeks: Bridge Creek, Big Branch, Leiths Creek, and Little Creek. Leiths Creek, Big Branch, and Little Creek all discharge into Bridge Creek five miles south of the city. The flood plains of Bridge Creek, Big Branch, Leiths Creek, and Little Creek are subject to flood and are undesirable for urban development.

Because of the flat character of the land, the above creeks and their numerous branches include rather broad flood plains (vary from 200 to 800 feet wide). These drainage channels have affected and will continue to affect the physical development in and adjacent to Laurinburg. Flood plains, just as rivers or limited access highways, add a major obstacle to continued urban expansion. These barriers to urban expansion must be jumped. Since some of the flood plains in Laurinburg are narrow, they do not represent a major deterrent to urban expansion. It is expected, however, that growth from the city will generally take place more rapidly where broad flood plains do not have to be crossed.

CITY OF LAURINBURG, N. C.

TOPOGRAPHY & DRAINAGE

SOIL SUITABILITY[1/]

The Laurinburg Planning Area is covered by five soil groupings that differ in their suitability for urban development. The groupings of soils relevant to urban development is shown on the Soil Suitability Map. Table 11 indicates the suitability of soils for urban development.

There is a substantial amount of vacant land located within the planning area. Not all of this land will be needed for urban development during the 20-year planning period. Development of land with soil problems should be discouraged by use of the zoning ordinance and subdivision ordinance.

The use of septic tanks places limits on the density of development. Residential lots in areas to be served by septic tanks should not be smaller than 10,000 square feet where public water is used, nor smaller than 20,000 square feet in size where individual wells are used.

Percolation tests should always be made before septic tanks are used. These tests may indicate that septic tanks are not usable because of the high water table or that an even larger lot will be needed to avoid health hazards.

Soil Suitability and Land Development

Group I soil areas are well drained. They will support buildings and roads and will absorb water at a rate suitable for septic tanks. Group I soils are the best soils in the planning area for urban development.

1/ Source: Soil Survey for Scotland County by the Soil Conservation Service, U. S. Department of Agriculture, 1963 (Mr. F. O. Clark, County Conservationist).

Soil suitability for urban development interpretation by State Soil Scientist, Mr. Forrest Steele.

Despite the fact that these soils are suitable for septic tanks when lots are small, septic tanks are so inferior to a public sewer system that they should be discouraged whenever it is feasible to connect with the Laurinburg sewer system. Where city sewer service cannot be provided, a public water supply is desirable. In urban areas with high densities, it is too easy for a well to become polluted from septic tanks located on adjacent lots.

Group II soils include well to excessively drained sands and loamy sands. They rate moderate to slight limitations for urban uses. Their low filtering action may present hazards for contamination of wells when septic tanks are used. City water is needed to serve these areas. Their compaction is suitable for foundations and roads, but their low water holding capacity makes it difficult to maintain grass on playgrounds. Septic tanks function well on this type soil.

Group III soils are moderately well to somewhat poorly drained with sandy surfaces and a high water table. Septic tanks generally do not function properly in this type soil. Consequently, urban development should either be discouraged in areas with Group III soils or city sewer service should be required.

These soils have moderate to severe limitations for playgrounds, building foundations, and for roads, as a result of their seasonably high water table.

Group IV soils are poorly drained with very firm subsoils. They have severe limitations for urban uses (septic tanks, playgrounds, foundations, and roads), chiefly due to their high water table.

Group V soils are poor to very poorly drained and include sands, loamy sands, flood plains, and unclassified swampy areas.

These soils have severe limitations for septic tanks, playgrounds, foundations, or road construction. These are the least suitable soils in the planning area for urban development.

Septic tank disposal fields function best in Group I and Group II soils. Soils of Group III, IV, and V are generally unsuitable for septic tanks.

A public water supply is needed in Group II soils because these sands provide little filtering action and surface run-off could pollute shallow wells.

Group IV and V soils have severe foundation problems and are the least suited for urban development from this standpoint; generally, development should be discouraged in these soils as there is ample better land available. Because the soil information on the map is generalized and because soil characteristics may vary greatly on any given parcel, developers should be required to make percolation tests under the supervision of the county sanitarian if they plan to use septic tanks.

To insure against future flooding consequences because of an increase in the run-off rate resulting from full development, engineers should compute the flow moving through the new subdivision from the entire drainage basin (after development) and size all drainage ditches in the subdivision to accommodate this increased run-off.

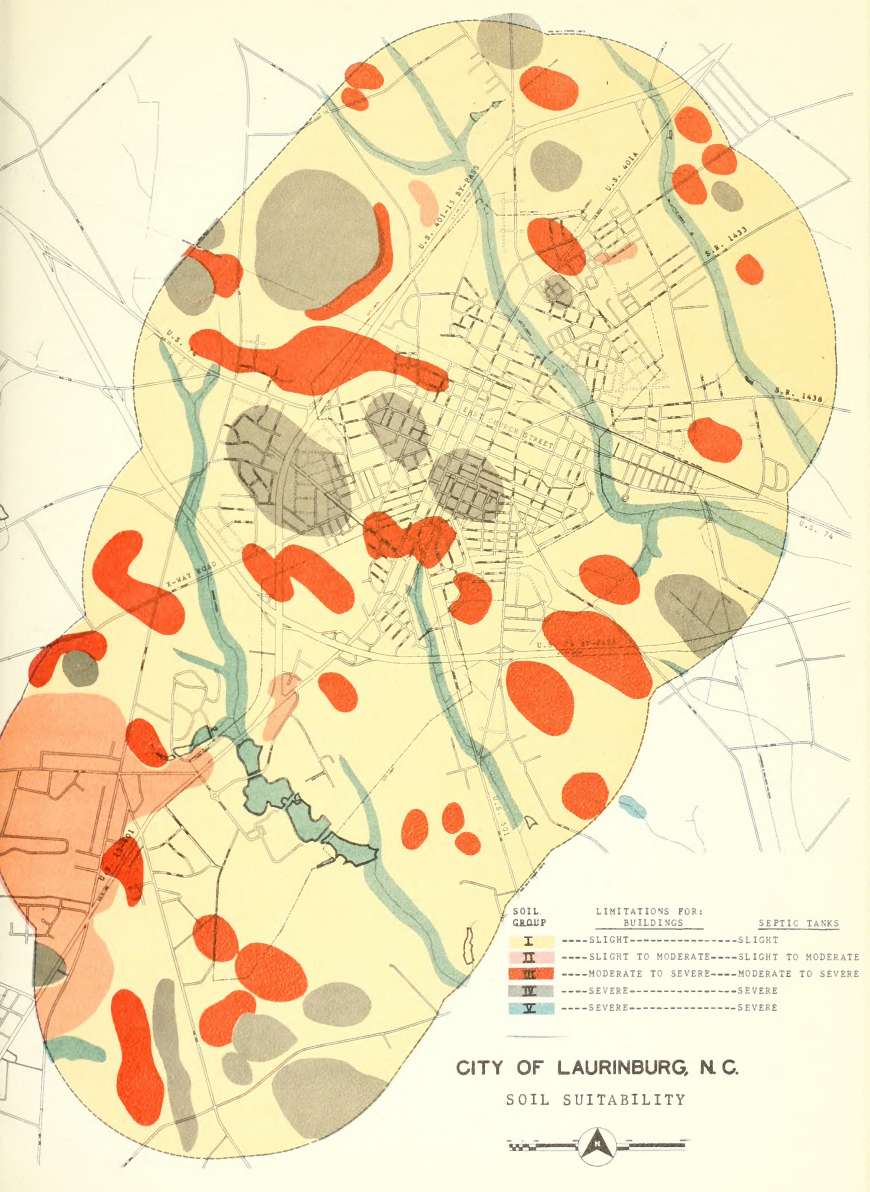

SOIL GROUP
LIMITATIONS FOR: BUILDINGS
SEPTIC TANKS
I ----SLIGHT----SLIGHT
II ----SLIGHT TO MODERATE----SLIGHT TO MODERATE
III ----MODERATE TO SEVERE----MODERATE TO SEVERE
IV ----SEVERE----SEVERE
V ----SEVERE----SEVERE
CITY OF LAURINBURG, N.C.
SOIL SUITABILITY
N

TABLE 11

LIMITATIONS OF PLANNING AREA SOILS FOR URBAN DEVELOPMENT

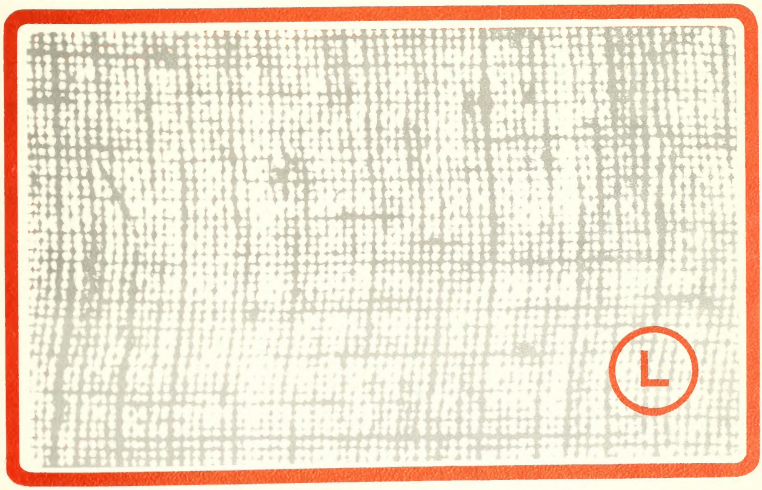
Soil Group	Septic Tank Filter Fields	Playgrounds	Residential Commercial or Light Industrial Building Foundations	Road Construction
I	Slight to moderate (perc.)	Slight	Slight	Slight to moderate (TSC)
II	Slight to moderate (low filtering action)	Moderate to severe* (traf.)	Slight to moderate (prod.)	Slight to moderate (TSC)
III	Moderate to severe* (wt., perc.)	Moderate to severe* (traf.)	Moderate to severe* (wt.)	Moderate to severe* (wt., TSC)
IV	Severe* (wt., perc.)	Severe* (traf.)	Severe* (wt., cor., sh-sw)	Severe* (wt., TSC)
V	Severe* (wt.)	Severe* (traf.)	Severe* (wt.)	Severe* (wt., TSC)

* Unsuitable.

Abbreviations for limiting factors:

FL - Flood Hazard
WT - Water Table
TRAF - Trafficability
SH-SW - Shrink-Swell Potential
PERC - Percolation Rate
COR - Corrosion Potential
TSC - Traffic Supporting Capacity
PROD - Productivity
AVL - Available

MAN-MADE FEATURES



WATER SYSTEM

Source

Laurinburg obtains its water from three wells and from a twelve inch raw water line that extends approximately four miles to Jordan Creek. The three wells have a combined effective capacity of about one million gallons per day that can be pumped and treated with chlorine at the well sites. About one million gallons per day can be pumped and treated from Jordan's Creek. Characteristics of the city's water sources are shown below:

TABLE 12

CHARACTERISTICS OF MUNICIPAL WATER SOURCES

Ground Water Sources

Wells	Type	Year Installed	Depth	Diameter	Yield (GPM)
#1 I. Ellis Johnson School site	Drilled	1952	350'	12" Gravel Packed	475
#2 Oak Street[a] (south of Glenn Acres)	Drilled	1964	375'	12" Gravel Packed	450
#3 At treatment plant site[a]	Drilled	1967	370'	12" Gravel Packed	450

Surface Sources

	Size	Yield (Million Gallons Per Day)
Raw water line extending northeast to Jordan Creek[b] (along Lee's Mill Road)	12"	1

[a] Aeration unit on this site.

[b] Low flow of Jordan Creek 15 million gallons per day.

Distribution and Storage

Water distribution lines are generally six, eight, ten, or twelve inches in diameter. (See City Water and Sewer System Map.)

The size and location of storage facilities are included on the following table. There is a total storage capacity of 800,000 gallons, of which 300,000 gallons is included in elevated reservoirs. The line pressure generally is 75 pounds per square inch.

TABLE 13

MUNICIPAL RESERVOIR DATA

	Tank Location	Height (feet)	Capacity (gallons)
Elevated Reservoirs	#1 McKay Street at Caledonia Road	110'	200,000
	#2 Fairly Street at McLaurin Avenue	110'	100,000
Ground Reservoirs	At the treatment plant		500,000
			800,000

The existing storage capacity provides the city with an adequate supply to meet fire flow demands. The city has a National Bureau of Fire Insurance Underwriters rating of six.

Area Served

All of the developed land within the city is served by city water and fire hydrants generally are located within 500 feet of urban development. Water lines extend outside the city to REA Magnet Wire Company to the north of the city and to Westwood subdivision which is located west of the corporate limits. For the most part, the fringe area is served by shallow wells. Although

the supply of water from shallow wells is generally adequate for human consumption, its quality is poor due to excessive amounts of iron and carbon dioxide. Excessive amounts of iron in the water causes discoloration of clothing, deposits of scale in the pipe, etc. This is less a problem for city wells because these wells are deeper and because city water is treated with sodium hydroxide for PH adjustment, liquid caustic and calgon for corrosion control. At two of the wells, aeration treatment to remove carbon dioxide and iron is provided.

Treatment

The present treatment plant was built in 1922. It has a capacity of one million gallons of surface water per day. The treatment process includes chlorination, sedimentation, PH adjustment, post chlorination and fluoride for surface water. In addition to the treatment of surface water at the treatment plant, chlorine and fluoride is added at all of the well sites.

Consumption and Capacity

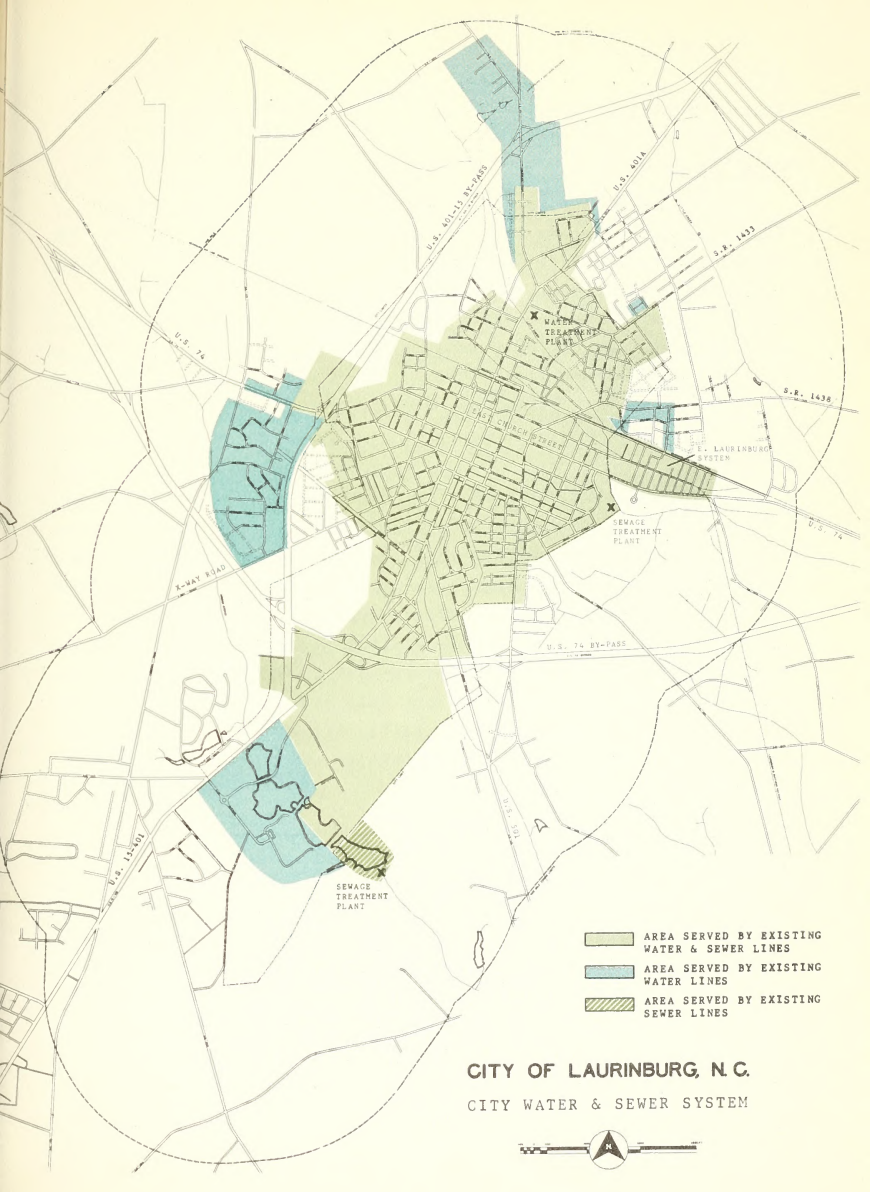
The city's 1966 average daily consumption was one million gallons (approximately 100 gallons per capita per day). Peak 1966 consumption was approximately one and one-half million gallons per day (approximately 150 gallons per capita). The city serves 2,600 customers. Present ground water sources yield approximately one million gallons per day and surface water sources yield an additional one million gallons per day.

TABLE 14

CHEMICAL AND PHYSICAL PROPERTIES OF MUNICIPAL WATER

	Juniper Creek - Raw	Well No. 1	Well No. 2	After Treatment	U. S. Public Health Service Standards (Max. PPM)
Iron and Manganese	.27	.34	.60	.04	.3

Source: City Manager's Office.



CITY OF LAURINBURG, N. C.

CITY WATER & SEWER SYSTEM

SEWER SYSTEM

Area Served

Major outfall sewer lines of fifteen and eighteen inches generally extend along the major drainage channels to either the sewage treatment plant on Leiths Creek at Hall Street or to the sewage treatment plant located east of the college on Bridge Creek. Most of the developed land within the corporate limits will be served by the city sewer system when completed. (See City Water and Sewer System Map.) In the fringe area sewer service is provided by septic tanks.

Treatment Plant and Capacity

The two sewage treatment plants are located at the city's lowest elevations on Leiths Creek and Bridge Creek. The Bridge Creek plant has a treatment capacity of .5 MGD - million gallons per day - (complete primary and secondary treatment) and could serve up to 5,000 people. The existing plant on Leiths Creek has a capacity of .6 million gallons per day. Built in 1922, it is completely inadequate and provides only primary treatment. The new plant (to be constructed on Leiths Creek within the next two years) will provide a treatment capacity of 1.5 MGD and could serve up to 15,000 people.

Drainage Basins and Gravity Flow

The four drainage basins of Laurinburg are: Bridge Creek, Big Branch, Leiths Creek and Little Creek. These drainage basins and the area that can be served by gravity sewer service from the existing sewage treatment plants are shown on the Topography and Drainage Map. It is important that city sewer service be provided by gravity flow because this is the most economical method to provide service.

Gravity flow eliminates pumping stations which are costly to install and maintain. Gravity flow sewer service can be provided by lines that either follow drainage basins or by connecting drainage basins with deep lines laid across ridges that separate basins. It is expensive and not always practical to connect drainage basins by deep lines.

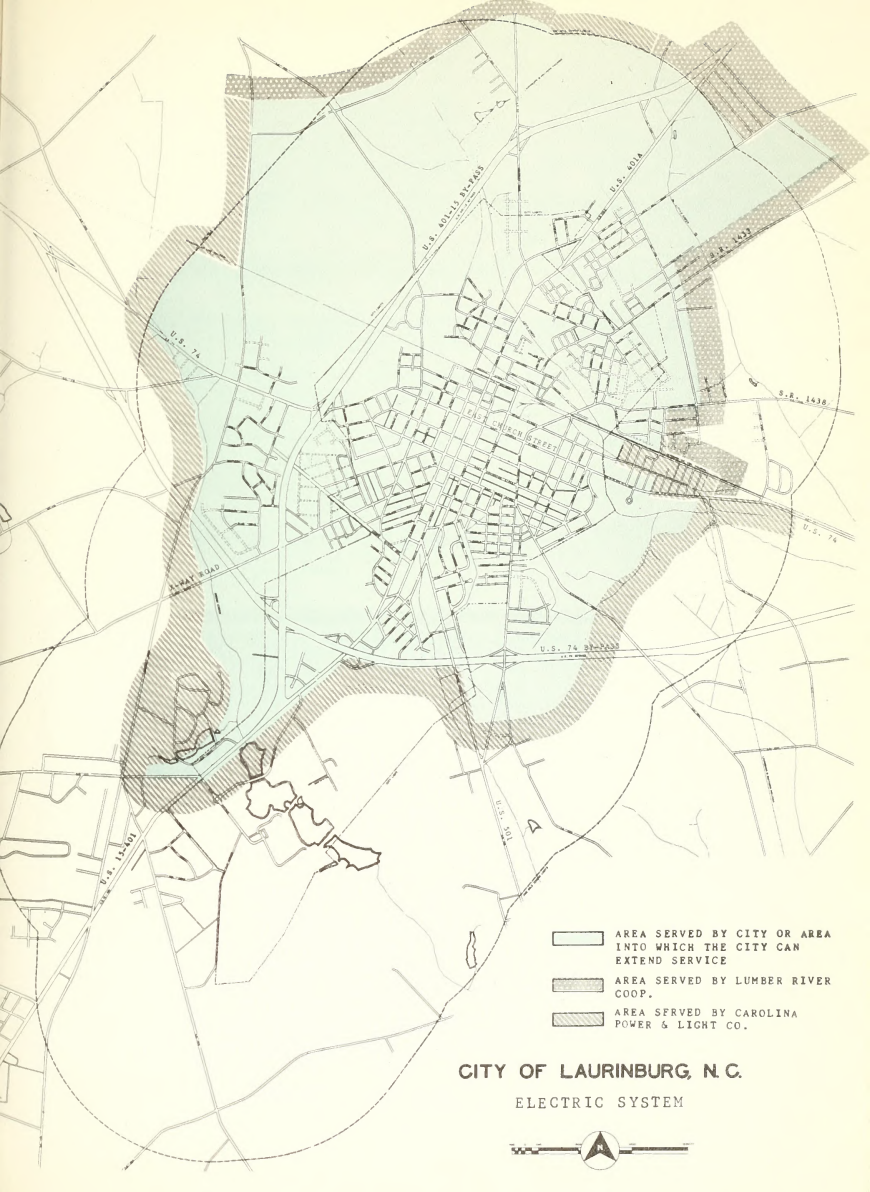
The watershed area of Leiths Creek includes most of the incorporated area of Laurinburg and extends also to the north and west of the city. It is bounded on the south and west by Church Street and South Caledonia Road. The watershed of Big Branch Creek is bounded on the north and east by the Leiths Creek drainage basin and the west generally by Bypass 401-15. The drainage basin of Bridge Creek is located west of Bypass 401-15. St. Andrews College is located in this drainage basin. A deep sewer line connects the drainage basin of Big Branch with the Bridge Creek basin and with the sewer treatment plant situated east of the college. Little Creek drainage basin is located to the north and east of Blue Street. Sewage will not flow from this basin to the Leiths Creek treatment plant by gravity; consequently, development should be discouraged in this basin by requiring larger lots in the zoning ordinance.

ELECTRIC SYSTEM

The Electric System Map indicates the area now served by the city electrical system and the area in which the city can extend its electrical lines. This includes all of the land within the corporate limits except St. Andrews College and the land in the fringe area to the west of Laurinburg (Scotsdale, Westwood McLaurin Acres subdivisions, etc.) and to the north (vicinity of Ingraham Watch Plant and out U. S. 401 toward Wagram to the one-mile zoning limit). Most of the development to the east and south is served by Carolina Power and Light Company including St. Andrews College. City electric lines cannot be extended into areas served by other companies.

Laurinburg, like other North Carolina cities, makes a profit from its electric system. City electric systems are not taxed; as a result, the surplus funds of the system are often used to make contributions to the sewer system and to meet other city service costs. In some cases the rates for city electricity may be raised to offset high property tax rates. As a result, customers connecting with the city electric system are paying for many of the service costs of the city. Under the city's present policy, where the city electric system finances many services, the city would not annex areas which are served by the Lumber River Electric Cooperation or by Carolina Power and Light Company. The city must provide for newly annexed areas equal municipal services to that provided within the corporate limits. Police services, etc., must be extended immediately and a contract must be let for major water and sewer lines within one year after annexation. As a result, future city annexation will have to be made to the west or to the north where city electrical lines can be extended. Unless the legislation that was enacted by the 1965 Legislature is repealed to permit Laurinburg to acquire from private power companies electric lines in newly annexed areas, the areas in which the city can extend its power

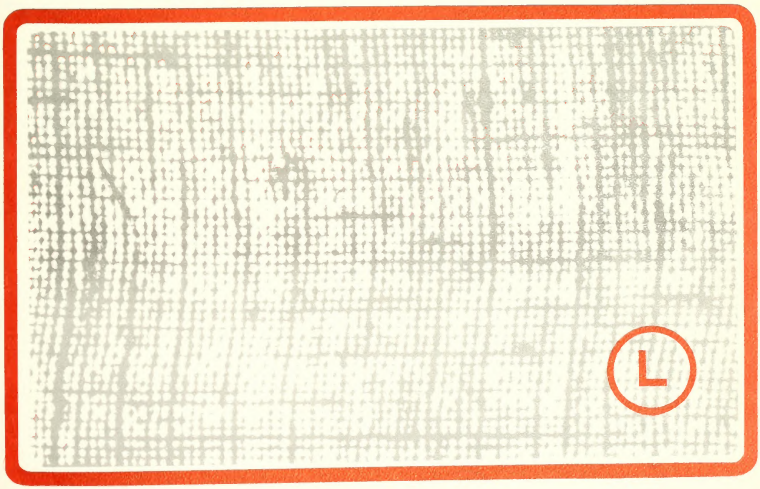
lines will determine where future annexations are made and will determine the future geographic area of the city.



CITY OF LAURINBURG, N. C.

ELECTRIC SYSTEM

CLIMATE



CLIMATE[1/]

Two climatic factors have had a definite influence on the existing land development pattern in Laurinburg. They are rainfall and direction of winds.

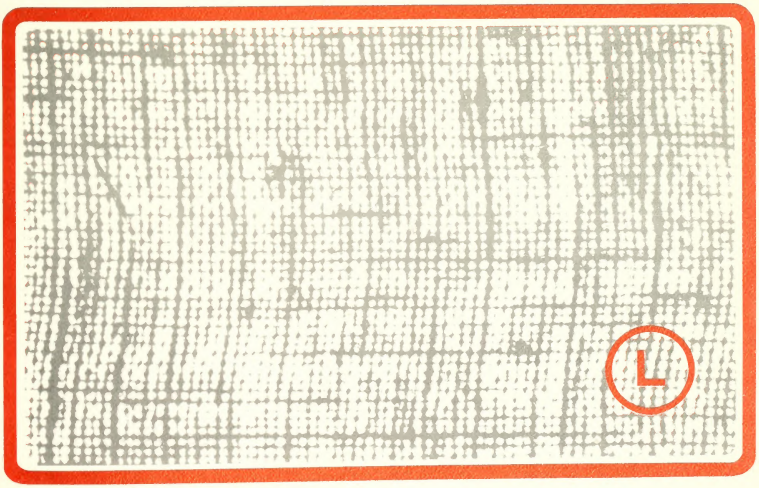
Precipitation varies seasonally, but is generally well-distributed throughout the year. The average annual precipitation is 48.5 inches, with the heaviest fall occurring in July and August. Summer showers are heavy and brief; however, they occasionally inundate low areas along Leiths Creek.

Since winds carry with it smoke, noise, and odors, its direction is an important factor in locating land use. Uses that emit objectionable traits are less detrimental to the city when located to the northwest because winds are generally from the southwest for most of the year except during September and October. During these two months, the winds come from a northeasterly direction.

Temperatures have little influence on the land development pattern. The climate is generally mild with a frost-free growing season of approximately 225 days. The January average temperature is 46.2° and the July average is 79.2°.

1/ Source: N. C. State Climatologist.

MISCELLANEOUS FEATURES



MISCELLANEOUS FEATURES
(THAT HAVE INFLUENCED THE EXISTING DEVELOPMENT PATTERN)

In addition to drainage, soils, utilities, and climate, the following features have also influenced the pattern of development:

1. Land Ownership - Most of the vacant land has not developed because it is: held for a higher price and it is often passed by developers; held by an estate or corporation for another use; or held in large parcels for farm use.

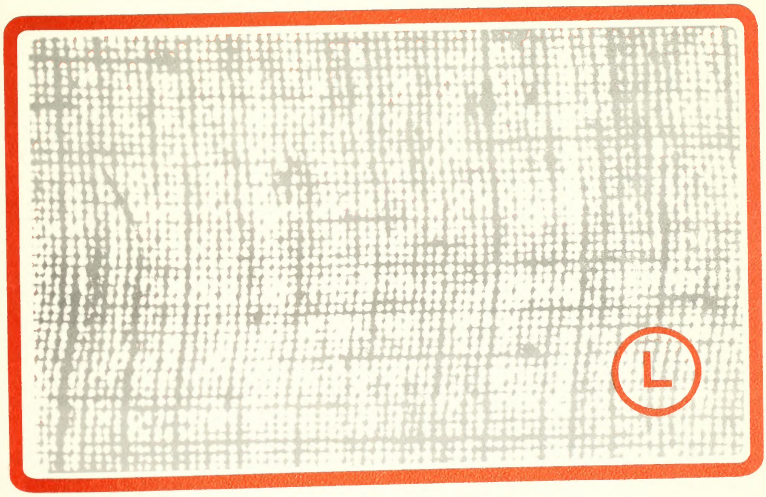
2. Highway Location - Generally land situated on a paved state highway or secondary road has developed first (U. S. 401, U. S. 74, U. S. 15, U. S. 501, and N. C. 79).

3. Segregation of Income Groups - Higher income groups normally avoid building high value housing near low value housing or housing that is dilapidated or deteriorated.

4. Railroad Location - Businesses and industries handling bulky items generally located adjacent to railroads to save transportation costs. Examples in the Laurinburg Planning Area include bulk oil plants, a flour mill, textile mills, a fertilizer plant, and a sawmill.

5. Traffic Flow - Land uses that depend on automobile mobility locate where the traffic volumes are greatest. This is illustrated by automobile sales agencies, filling stations, restaurants, and motels located on or adjacent to Bypass U. S. 15-401.

EXISTING LAND USE ANALYSIS



EXISTING LAND USE ANALYSIS

The Division of Community Planning conducted a land use survey of Laurinburg and the planning area in February, 1967, to determine the existing use of each parcel of land.

The results of this field land use survey are shown on the existing land use map following page 58. An analysis of the existing land use pattern shown on this map reveals important information.

Measurements made from the existing land use map revealed a total of 2,880 acres of land within the Laurinburg corporate limits, of which 74 percent is developed for urban use. The remainder of the land is either vacant or in use as agricultural land. Some of it is unsuitable for urban development because it is subject to flooding or the soils are not suitable for urban development.

In the fringe area, there is a total of 8,897 acres, but only about 14 percent is developed. The remainder of the land is undeveloped or is used for agricultural purposes.

The uses of land surveyed are divided into five classifications for analysis. Typical examples of the uses found in each of these classifications are given below:

Residential - Single family, two family, multi-family, and mobile home.

Retail Trade and Services

Retail Trade

Primary Trade - Department, clothing, jewelry, etc.

Secondary Trade - Furniture, hardware, etc.

Convenience Trade - Service station, drugs, etc.

Services

Administrative Services - Office, etc.

Consumer Services - Restaurants, drive-ins, etc.

Business Services - Repair establishments, garages, body and paint shops, etc.

Social and Cultural

Personal Development - Schools, parks, etc.
Health and Welfare - Hospitals, doctor's offices, etc.
Cemetery - Cemeteries.

Wholesale Trade and Manufacturing

Wholesale Trade - Bulk oil, electrical parts, etc.
Manufacturing - Warehouses, textile mills, etc.

Transportation

Streets and Alleys
Railroads
Depot

The distribution of land use in Laurinburg by percent of total developed area was compared with two other communities in Appendix Table 8. The distribution of land use by type in Laurinburg generally compares favorably with Sanford and Dunn when St. Andrews College is excluded. If a comparison is made to Laurinburg's distribution of developed land use in 1957 (before St. Andrews College was established), the percentage distribution of developed land used for residential, commercial, etc., is similar to that found in Sanford and Dunn also.

The Existing Land Use Map following page 58 also gives an idea of the distribution of the population within the planning area itself. The small circles represent residences. The average residence contains 3.6 people.

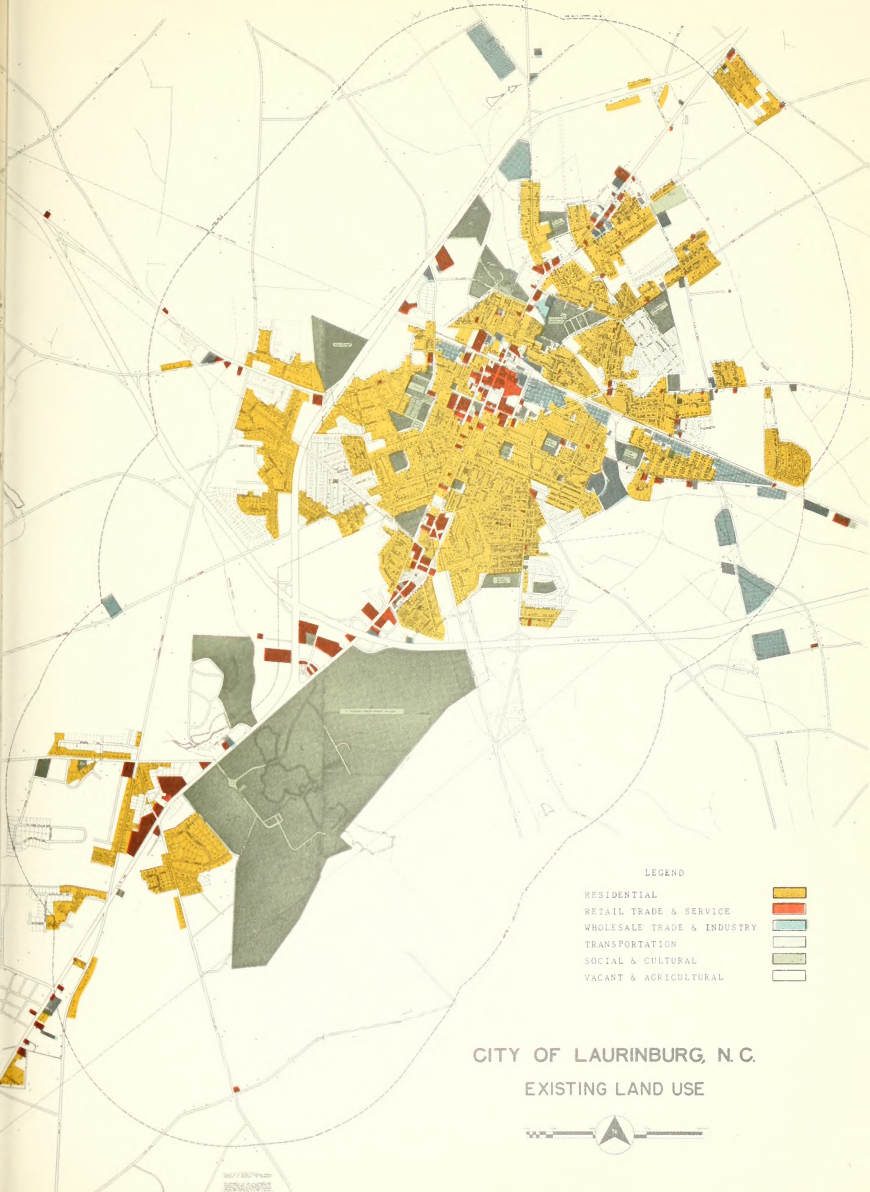
The information about the present distribution of the resident population will be useful in the following manner:

1) Determining where the population is of sufficient density that warrants urban-type services, such as public sewer and water, paved streets, street lighting, sidewalks, etc.

2) Choosing the proper location and capacity of sewer and water lines, streets, schools, and recreation facilities.

3) Choosing the proper location of land parcels to be planned and zoned for residential use and for consumer-oriented business.

4) Determining areas that should be annexed to the city.



CITY OF LAURINBURG, N. C.

EXISTING LAND USE

RESIDENTIAL LAND USE

Most of the land in Laurinburg and in the fringe area is used for residential purposes of the single family type.

Residential areas for the most part include lots of ample size, paved streets, yards landscaped with trees and shrubs, and good maintenance of buildings. Continued maintenance of buildings and yards is about all that is necessary to retain the character of these areas.

There are, however, problem housing areas in Laurinburg where housing is deteriorated or dilapidated, lots are small, and streets are unpaved. See Housing Conditions Map.

In Laurinburg 594 acres or 28 percent of the developed land is used for residential purposes. This is much smaller than the percentage found in other similar size communities shown in Appendix Table 8. The smaller percentage of land used for residential purposes in Laurinburg is due to the large amount of land included in St. Andrews College.

Fringe Area

Most of the new residential development added is locating in the fringe area to the west and south of St. Andrews College. A large number of residences have also been added to the west of Bypass U. S. 15-401 in Scotsdale, Westwood, and McLaurin Acres subdivisions.

TABLE 15

RESIDENTIAL LAND USE
(Acres)

	City	East Laurinburg	Fringe Area	Total Planning Area
One Family	557.0	36.0	397.5	990.5
Two Family and Multiple Family	36.0	--	---	36.0
Mobile Homes	1.0	--	9.5	10.5
TOTAL	594.0	36.0	407.0	1037.0

Housing Conditions

An important characteristic of residential areas is revealed in the physical condition of the housing. An inventory of the exterior appearance of housing in Laurinburg was made by the Division of Community Planning in February of 1967. Housing is classified into three types - standard, deteriorating and dilapidated, as defined below. The condition of housing units is shown on the Housing Conditions Map.

Definition

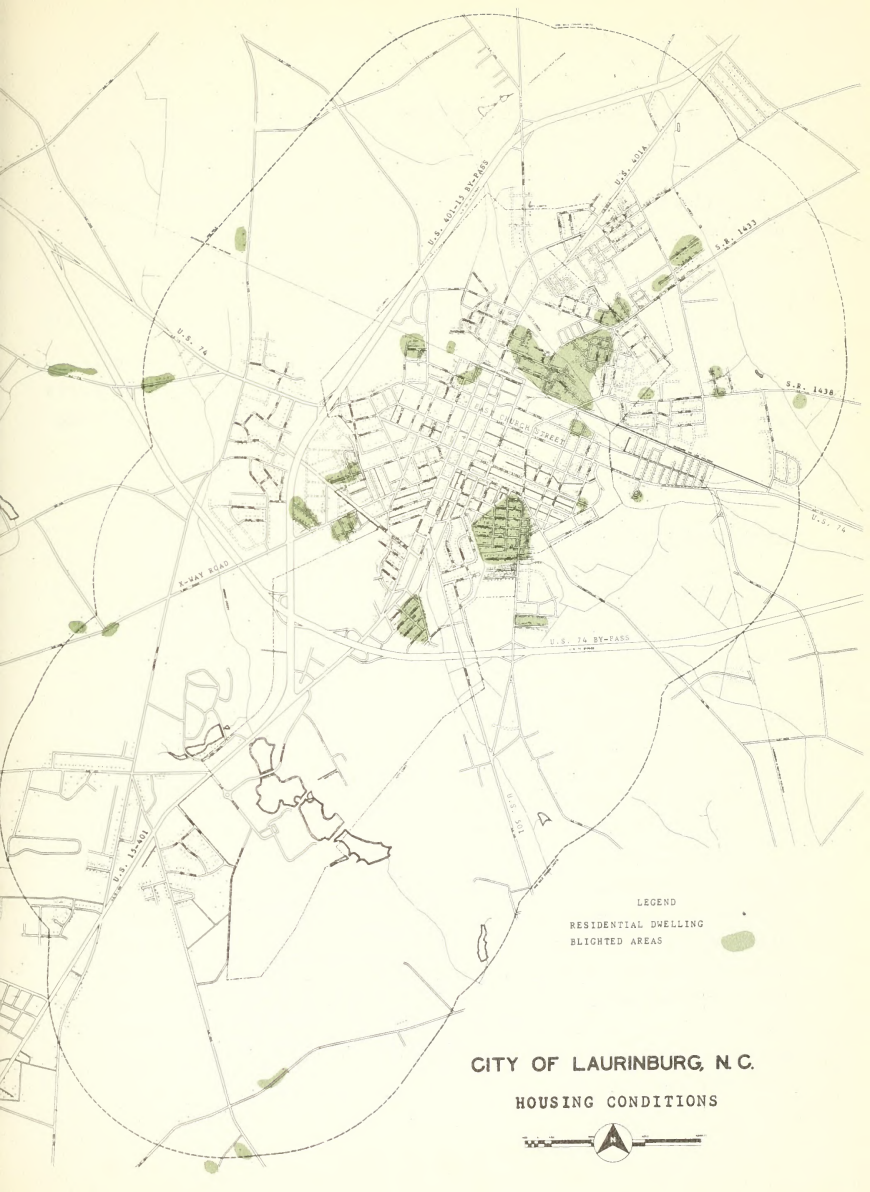
1. Sound Housing is that which has no defects or only slight defects which normally are corrected during the course of regular maintenance. Examples of slight defects are: lack of paint, slight damage to porch or steps, and small cracks in walls.

2. Deteriorating Housing needs more repair than is provided in the course of regular maintenance. Such housing has one or more defects that must be corrected if the unit is to continue to provide safe and adequate shelter. Examples of defects are: holes, open cracks, loose or

missing material over a small area of wall, foundation, floor or roof, or badly damaged steps or porch.

3. Dilapidated Housing does not provide safe and adequate shelter. In its present condition, it endangers the health, safety, or well-being of the occupants. Such housing represents inadequate original construction or has one or more critical defects, or a combination of minor defects so critical or wide-spread that the structure should be extensively repaired, rebuilt, or torn down.

It is apparent that residential blight has hit Laurinburg hard, and a major effort will be required to overcome this problem. The enforcement of the city's minimum housing ordinance is a step in the right direction. The final solution, however, will involve the construction of additional housing for displaced residents, cleaning hopelessly blighted areas, and rehabilitating salvageable areas. Federal assistance will be necessary to finance this effort. The starting point in such a move to eradicate blight is the "neighborhood analysis study," a detailed investigation of structural and social conditions in residential areas where blight is evidenced. This study has recently been completed. Recommendations for dealing with blighted areas are made in the Laurinburg Neighborhood Analysis Study. These recommendations should be implemented.



CITY OF LAURINBURG, N. C.

HOUSING CONDITIONS

RETAIL TRADE AND SERVICES LAND USE

Existing retail trade and service uses are located in one of three types of districts in Laurinburg:

1) Central Business
2) Highway Service Business
3) General Business

In addition to the above classifications of types of business districts, there are numerous marginal business and service units scattered in nonwhite areas and along the major highways leading to and from Laurinburg.

Central Business District

The Central Business District of the City of Laurinburg is bounded by Church Street, James Street, Everett Street, and the Seaboard Airline Railroad. Most of the business establishments are arranged to front on Main Street.

The Central Business District problems were analyzed in detail in a Central Business District study prepared by the Division of Community Planning in 1965. In this particular study, only the major problems are identified. For a more detailed study, reference is made to the report which is available at the City Hall.

In the Central Business District Report, recommended solutions are designed to provide adequate improved off-street parking (paved, marked, and landscaped); to make the Laurinburg Business District more attractive and convenient to shop in; to provide adequate and attractive walkways; to provide both front and rear entrances and attractive show windows; to unify the appearance of commercial buildings in the Central Business District; and to regulate the use and type of signs displayed for advertising.

To remain in a competitive position with surrounding towns and shopping areas in Laurinburg, the downtown merchants and building owners must cooperate among themselves and with the city government to make the downtown area a safe, convenient and attractive place to shop.

Highway Service Business

The highway service business areas of the City of Laurinburg are located on U. S. 401-15 Bypass (Holiday Inn and Laurinburg Motel). These businesses cater to vehicular traffic and therefore seek to locate where they can easily be seen by the motoring public.

The development of future highway service areas should be guided into compact and compatible arrangements with the zoning ordinance. New buildings should be set back from the highway to provide an attractive appearance. Poorly planned and located highway service business areas deteriorate into unattractive problem areas, the result being that new development locates further and further from the city to escape the congestion, the poor appearance, and the general undesirable character of the older district.

General Business

General business uses are concentrated in Laurinburg in three general areas: (1) South Main Street between the Central Business District and St. Andrews College. (Examples of the general business establishments in this particular area are new and used car dealers, bowling alleys, drive-in restaurants, tire dealers, cleaners, and automobile service stations.) (2) North Main Street. (Examples of general businesses included in this area are automobile service stations, drive-in restaurants, beauty shops, funeral homes, grocery stores, and a bakery.)

(3) Along Bypass U. S. 401-15. (Examples of the firms located here include automobile dealers, electrical equipment company, and a tractor sales business.)

Marginal Business and Service Units

There are a number of small grocery stores and service station/grocery store combinations located throughout the non-white areas of Laurinburg in Washington Park and Lincoln Heights subdivisions.

In the city is included a total of 105 acres of retail trade and services uses. This represents 4.8 percent of all the developed land.

Fringe Areas

In the fringe areas, examples of retail trade and service establishments include grocery stores along U. S. 74 West, U. S. 74 East, and Lumberton Road.

A large area of general business use extends along U. S. 401-A, north of Lees Mill Road (used cars, new cars, and tire sales).

TABLE 16

RETAIL TRADE AND SERVICES LAND USE
(Acres)

	City	East Laurinburg	Fringe Area	Total Planning Area
Retail Trade				
Primary Trade	5.1	--	.5	5.6
Secondary Trade	36.3	--	7.7	44.0
Convenience Trade	22.4	1.8	12.1	36.3
	63.8	1.8	20.3	85.9
Services				
Consumer	31.4	2.6	27.9	61.9
Professional	7.3	--	1.5	8.8
Business Service	2.2	.4	.4	3.0
	40.9	3.0	29.8	73.7

SOCIAL AND CULTURAL LAND USES

Examples of social and cultural uses of land in and around Laurinburg include health and welfare (hospital, clinic, doctors' and dentists' offices), personnel development organizations (schools, churches, parks, and St. Andrews College), and cemetery facilities. See Table 17.

The medical services offered in Laurinburg are centered around Scotland Memorial Hospital. In the same vicinity are located several doctors' offices, an apothecary store, and a medical clinic. This district is bounded on the west by attractive residences, the north by a park, and to the south by Covington Street Elementary School. These major establishments prevent expansion except to the east where older residences are located.

Some of the older school sites in Laurinburg are noticeably small. The newer school sites are located on larger plots of land. The majority of land use of this type is included in St. Andrews College (832 acres), Scotland High School, and in Laurinburg Institute. The following park sites in the city are included in this classification:

Presbyterian Church Park Grounds
on West Church Street[1/]

American Legion Ballpark and Pool
on Yadkin Avenue[1/]

Jaycee Picnic and Baseball Park
on North Main Street[1/]

Hammond Park with shelter on
Prince Street

[1/] Includes lighted ballpark.

Park located south of I. Ellis Johnson School[1/]

Laurinburg Community Center Building on Atkinson Street

Little League Ballpark east of the Laurinburg Motel[1/]

Washington Park Playground[1/]

East Laurinburg Playground[1/]

Park sites are well distributed geographically in Laurinburg to serve all of the people. Sites, however, are small and additional facilities are needed at all parks. In addition, the city with 8,500 people should have about 85 acres in parks. Only about 42 acres of park land are provided which is 43 acres short of the 10 acre per 1,000 minimum recommended by the National Recreation Association.

If recreation facilities were provided for the people of the fringe area, an additional 58 acres would be required.

Older churches are located downtown, generally on small sites, without sufficient off-street parking space. The zoning ordinance now requires that any new churches to be built must provide sufficient off-street parking.

Two cemeteries are located in the city limits (1) on Hillside Avenue and (2) Hillside Memorial Park on U. S. 401-15 Bypass.

A total of 1,020 acres of land is used for social and cultural development in Laurinburg, 47.7 percent of the developed land in the corporate limits.

[1/] Includes lighted ballpark.

Fringe Areas

In the fringe areas are located several church sites, the new Scotland High School, and College Park Golf Course. (A total of 92.4 acres is used for social and cultural activities in the fringe area.)

TABLE 17

SOCIAL AND CULTURAL LAND USE
(Acres)

	City	East Laurinburg	Fringe Area	Total Planning Area
Health and Welfare	6.2	--	--	6.2
Personal Development	960.8	8.3	90.3	1,059.4
Cemetery	53.0	--	2.1	55.1
	1,020.0	8.3	92.4	1,120.7

WHOLESALE TRADE AND MANUFACTURING LAND USE

This category includes also manufacturing services. Manufacturing service land use includes the city water treatment facility and sewer treatment plant. Examples of wholesale trade in Laurinburg include wholesale electrical, coal, and bulk oil. Manufacturing firms concentrated on the Laurinburg and Southern and Seaboard Air Line Railroad are a textile mill, machinery sales, and a flour mill.

Most of the existing wholesaling establishments are clustered along the railroads in the city. Recently added wholesale establishments have located on Bypass U. S. 401-15. There has also been some relocation of older establishments from the crowded central portions of the city to the fringe area. In the fringe area space for off-street parking, loading and unloading, and future expansion is available. Relocated establishments have also relieved crowded narrow downtown streets of heavy truck traffic.

Several factors should be considered in locating wholesaling activities in the fringe area:

(1) Many wholesaling activities deal in flammable materials (bulk oil, gas, etc.). The larger fringe area sites afford some fire protection to abutting property owners by providing open space but in addition, a reasonable travel distance from the fire station and adequate water lines are needed for fire protection.

(2) Wholesaling activities should not be permitted near the Scotland High School or St. Andrews College. (Some wholesaling activities present a safety hazard and should not be permitted where large numbers of people are gathered.)

(3) Only about 200 acres of land are now used for industrial purposes so not all of the land located along railroads and major thoroughfares will be needed for this purpose. Only the most desirable sites that can be easily served with city utilities (sewer and water) should be zoned for wholesaling.

Manufacturing land use in the city has concentrated along the railroad (Laurinburg Machinery, Murray Gin, a flour mill, Dixiana Mill, etc.). In East Laurinburg the Waverly Mill is located on the railroad. Located east of Laurinburg in the fringe area are Scotland Mill #6, Laurinburg Plywood Company, Dixie Guano Fertilizer Company, and a saw mill.

Manufacturing districts that have been added recently are located to the north of the city on SR 1301 (REA Magnet Wire Company and Ingraham Watch Company). The McNair Seed Company processing plant and warehouse is also located in this general area.

All of the manufacturing establishments are served by city water except Dixiana Mills and Dixie Guano Company. Fire protection is provided by the city fire department. City sewer service is available only to those establishments located within the corporate limits.

The cost of extending large water lines to serve manufacturing plants is high. In the past this cost has been absorbed by the city. The county has absorbed some of the cost of aeration lagoons. For this reason any new manufacturing plants should be located where line extensions can be made at reasonable costs. This is generally along the Aberdeen Road to the north and SR 1603 to the south.

A total of 64.6 acres is included in wholesale trade and manufacturing use in Laurinburg. This is 3.0 percent of the developed land.

Fringe Areas

Land used for wholesale purposes in the fringe areas is concentrated on the Laurinburg and Southern Railroad. There are 123.4 acres in this category included in the fringe areas.

TABLE 18

WHOLESALE TRADE AND MANUFACTURING
(Acres)

	City	East Laurinburg	Fringe Areas	Planning Areas
Wholesale Trade	7.0	--	2.6	9.6
Manufacturing Service	30.1	2.2	9.2	41.5
Manufacturing Other	27.5	8.1	104.6	140.2
	64.6	10.3	116.4	191.3

TRANSPORTATION LAND USE

This category of land use includes roads, railroads, and the railroad depot.

There is a total of 80 miles of streets and alleys in the City of Laurinburg of which 17 miles are state maintained and 63 miles are city maintained. Thirteen miles of the city streets are unpaved or in need of improvements. See Road Conditions Map. See Table 20.

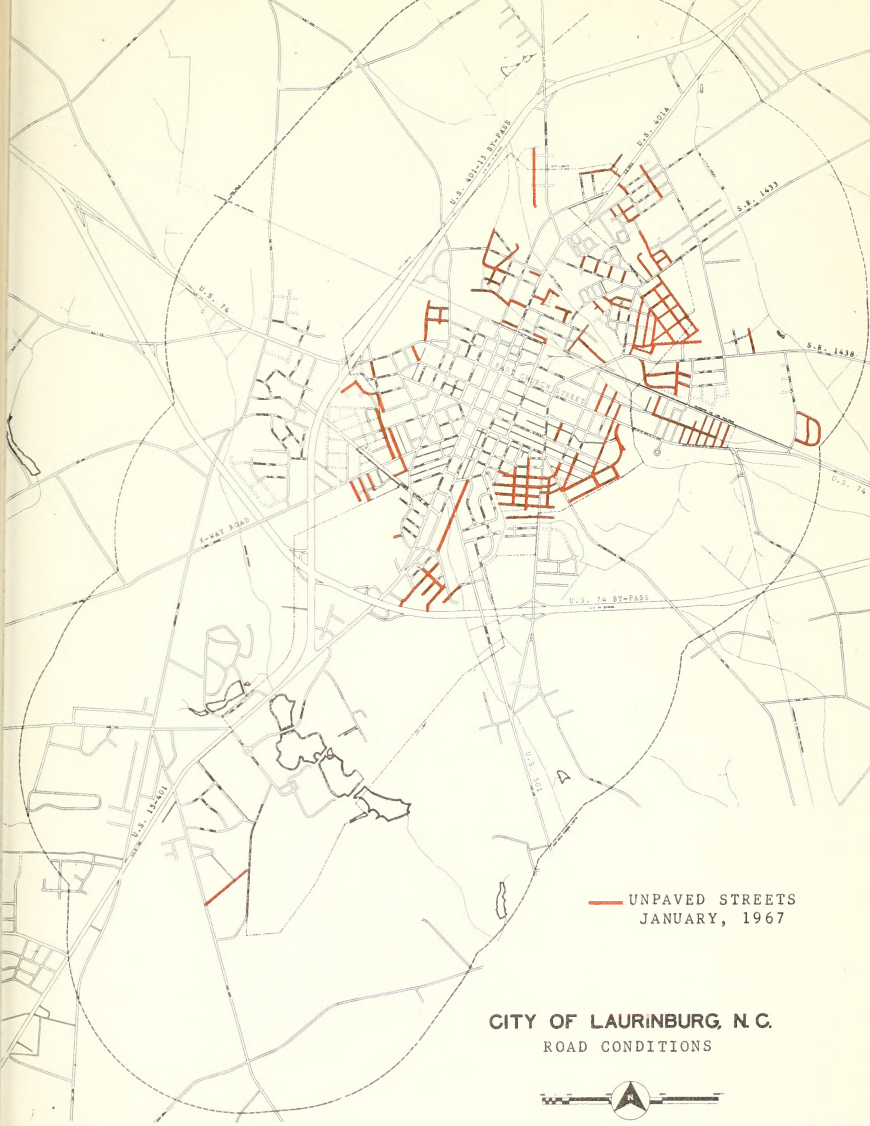
All of the older city maintained streets were developed in a grid pattern. The street layouts of some subdivisions have not been coordinated with adjacent developments.

In the fringe areas, roads are either a part of the state major or secondary highway system. Eleven miles are unpaved.

Railroads

The city is served by both the Seaboard Air Line Railroad (bisects the city east and west) and the Laurinburg and Southern Railroad (bisects the city in a northwest and southeast manner). Land along the railroad is utilized for manufacturing purposes for the most part.

There is a total of 359 acres used for transportation purposes in Laurinburg (17 percent of the developed area).



CITY OF LAURINBURG, N. C.

ROAD CONDITIONS

SOURCE: SURVEY BY DIVISION OF
COMMUNITY PLANNING

TABLE 19

TRANSPORTATION
(Acres)

	City	East Laurinburg	Fringe Area	Total
Streets and Alleys	337.1	15.1	513.4	865.6
Railroad	21.1	4.8	33.1	59.0
Depot	.7	--	--	.7
	358.9	19.9	546.5	925.3

TABLE 20

STREET MILEAGE

	Laurinburg		E. Laurinburg		Fringe Areas		Total	
	Paved	Unpaved	Paved	Unpaved	Paved	Unpaved	Paved	Unpaved
State Maintained Highways	15.4	--	.8	--	31.9	--	48.1	--
Secondary Roads	1.6	--	.3	--	14.5	11.2	16.4	11.2
City Maintained Streets	15.6	12.9	.4	1.5	--	--	16.0	14.4
Alleys*	32.6	2.3	--	--	--	--	32.6	2.3
	65.2	15.2	1.5	1.5	46.4	11.2	113.1	27.9

* Streets with a right-of-way less than 16 feet are too narrow to use Powell Bill Funds and were classified as alleys.

VACANT AND AGRICULTURAL LAND USE

Twenty-six percent of the 2,880 acres of land in the city is not developed for urban use. In the fringe area, 86 percent of the land is vacant (7,685 acres). Within the total planning area (city, East Laurinburg, and fringe area), 71.0 percent of the land is vacant (only about 29 percent is developed).

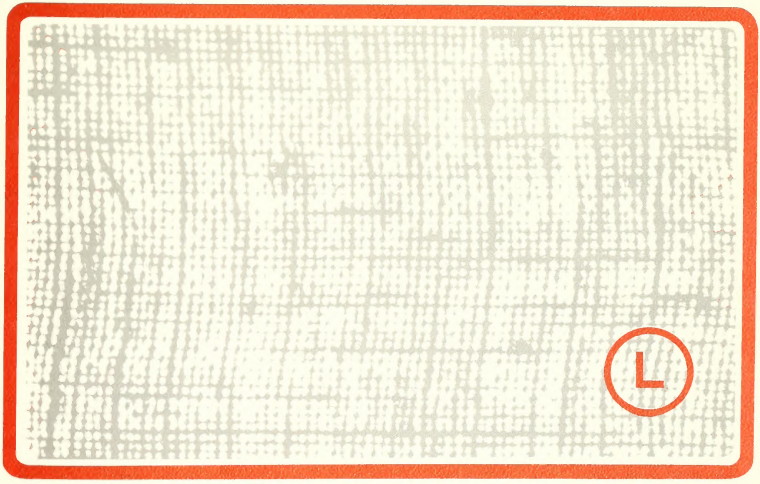
Of the vacant land found within the planning area, 76 percent is usable for urban development, assuring sufficient land for future urban development. Most of the vacant land in the fringe areas is used for agricultural purposes or forestry.

TABLE 21

VACANT AND AGRICULTURAL LAND
(Acres)

	City	East Laurinburg	Fringe Area	Total Planning Area
Vacant Land				
Usable Vacant Land	562.8	--	5972.7	6535.5
Marginal Land	175.0	--	1712.0	1887.0
(Area subject to flooding)	175.0	--	523.0	698.0
(Area with unsuitable soils)	--	--	1189.0	1189.0
	737.8	--	7684.7	8422.5

LAND USE PROBLEMS



LAND USE PROBLEMS

The land use problems of Laurinburg revealed in this study are summarized in the following discussion:

1. Mixed Land Uses - A scattering of small retail and service establishments in residential areas has caused deterioration.

2. Poor Lot Platting Practice - Land has been divided into lots which are too small. As a result, subdivisions with small and odd-shaped lots are blighted even before they are fully developed. Homeowners are now demanding larger lots, making many small existing lots obsolete. Subdivision regulations and the zoning ordinance will insure that new lots are platted larger.

3. Poor Street Layout - A large part of the residentially developed areas in the city have been divided into a girdiron street pattern, adding additional street mileage to maintain, wastefully consuming tax dollars. Streets intersect at acute angles or there are off-sets in street alignments. Some streets dead end without a turn around (see Poor Land Use Development Map).

4. Strip Development - Business development extends along South Main Street and U. S. 15-401 in an elongated fashion. This development

adds traffic hazards and reduces the carrying capacity of the streets. By control of curb cuts, building set backs, and requiring that sufficient off-street parking is provided, future development on South Main Street can be upgraded and controlled to such a degree as to avoid a traffic or safety problem.

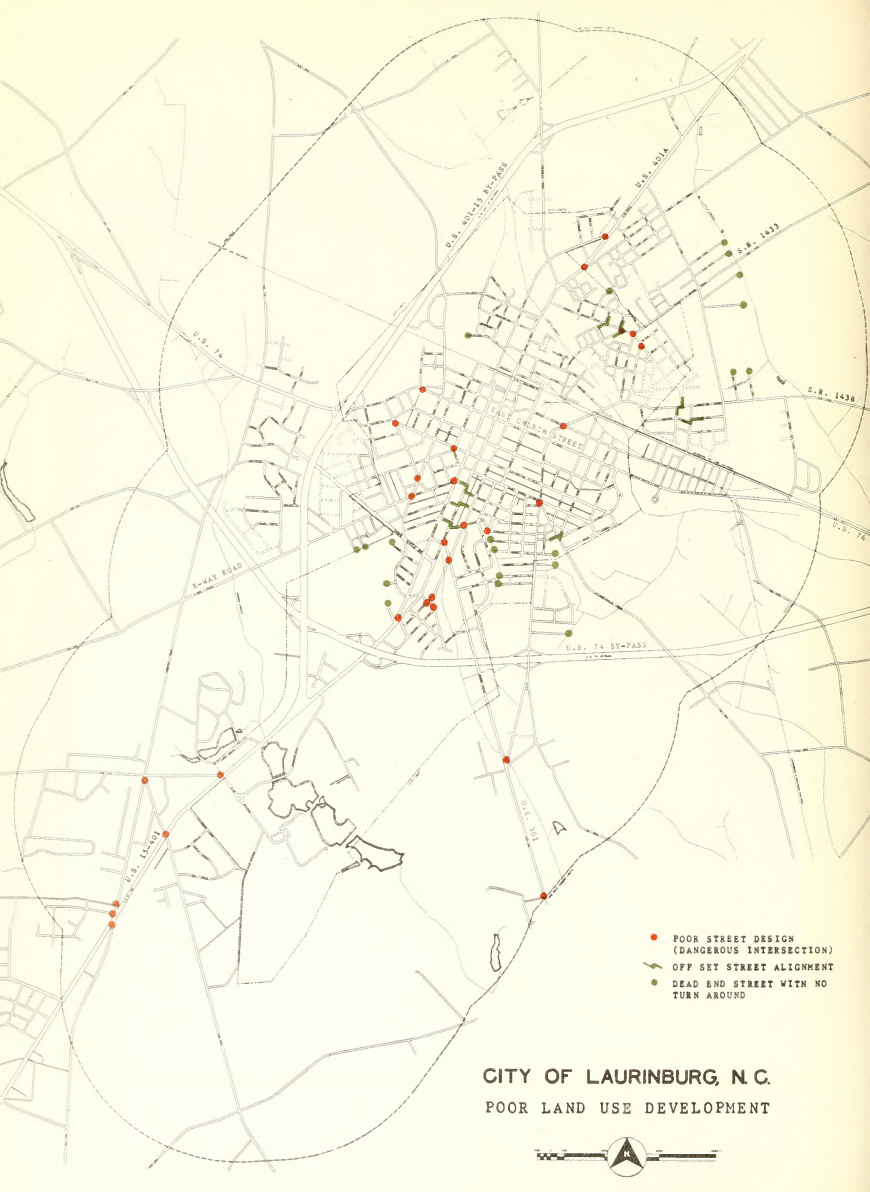
5. Flood Plain - Big Branch, Leiths Creek, Bridge Creek, and Little Creek include broad flood plains (200-800 feet wide). Construction that restricts the flow of water should not be permitted in these flood plains. The Zoning Ordinance should be amended to prevent any new buildings being placed in the flood plains.

6. Sprawl Development - Development to the south of the city is being added at distances too great to extend city utilities. Lots in these areas should be large enough to include both a septic tank and well on the same site (at least 20,000 square feet and 100 feet distance between the well and septic tank).

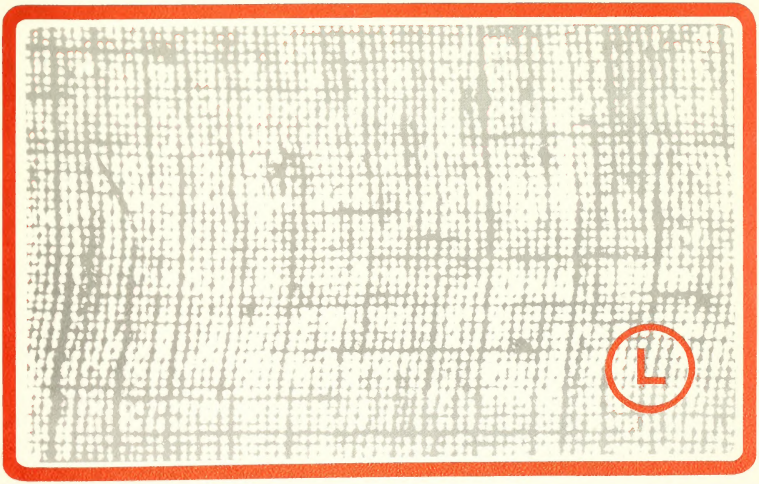
7. Dilapidated Housing - Concentrations of dilapidated housing found in Laurinburg should be eliminated by programming a number of urban renewal projects.

8. Lack of Improved Off-Street Parking in the Central Business District - Off-street parking in the Central Business District is for the most part unimproved. Lots are dirty, unmarked or unlighted.

9. Lack of Space for Needed Development - Insufficient space for the necessary enlargement of school sites is provided. Some of the existing school sites are land locked by residential development. The enlargement of these sites would be a very expensive undertaking now. Sufficient land should be purchased for school sites in the beginning. Schools tend to attract residential development which makes it prohibitive to expand the site at a later date.


U.S. 401-15 BYE-PASS
U.S. 401A
S.R. 1433
U.S. 74
S.R. 1434
CHURCH STREET
U.S. 74
X-WAY ROAD
U.S. 74 BY-PASS
U.S. 401
U.S. 15-501
POOR STREET DESIGN (DANGEROUS INTERSECTION)
OFF SET STREET ALIGNMENT
DEAD END STREET WITH NO TURN AROUND
CITY OF LAURINBURG, N. C.
POOR LAND USE DEVELOPMENT
N

CONCLUSIONS



CONCLUSIONS

These six points are major conclusions drawn from this study. These factors should be considered in developing the Land Development Plan.

1. The most suitable areas for new development are to the west. To the south lies poor soils for urban development and to the east (Little Creek drainage basin) city sewer lines cannot be extended to provide gravity sewage flow to the existing treatment plants.

2. Land that can easily be served by city water and sewerage should be developed first. The Planning Board and City Council should encourage this as much as possible in the Zoning Ordinance.

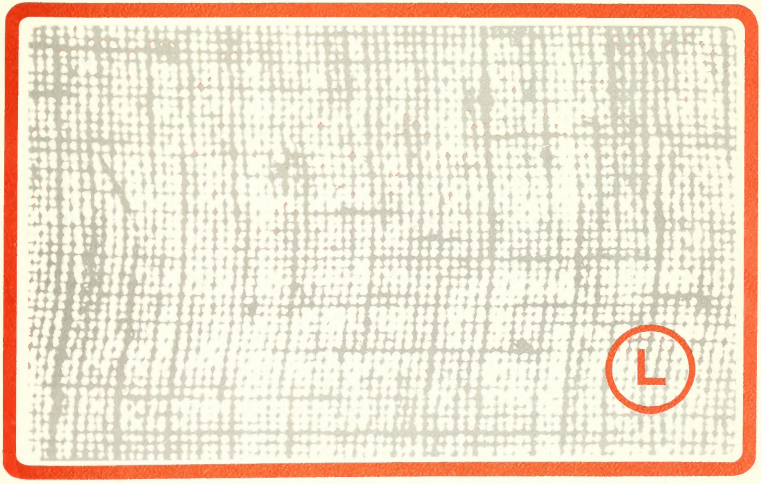
3. Industrial uses that produce noise, smoke, and odor should be located to the northwest of the city where the prevailing winds will carry these objectionable traits away from urban areas.

4. Desirable industrial sites along highways, railroads, and adjacent to the city utility lines (water and sewer) should be preserved for industrial purposes by the Zoning Ordinance.

5. Major business generators (department stores, clothing stores, etc.) should be located in the Central Business District.

6. Land uses which abut each other should be compatible; if this is not possible, buffers should be installed as required by the Zoning Ordinance.

APPENDIX



APPENDIX TABLE 1

SUMMARY OF THE VALUE OF ALL FARM PRODUCTS SOLD IN SCOTLAND COUNTY

	Amount		% of Total	
	1956 ($000)	1964 ($000)	1956	1964
Value of All Farm Products	5,603	10,704	100.0	100.0
All Crops	4,389	7,236	78.3	67.6
Field Crops	4,219	7,142	75.3	66.7
Tobacco	1,042	1,037	18.6	9.7
Cotton	2,266	3,165	40.4	29.6
Corn	211	620	3.8	5.8
Soybeans	200	624	3.6	5.8
Other (includes cotton seed, hay & deh. forage)	501	758	8.9	15.8 [a]
		938	--	
Vegetables	100	85	1.8	.8
Watermelons		20		
Other		65		
Fruit & Nuts	70	9	1.2	.1
All Livestock and Livestock Products	996	2,648	17.8	24.7
Turkeys	94	1,000	1.6	9.3
Broilers & Hens	120	120	2.1	1.1
Sheep, Hogs, & Cattle	215	413	3.8	3.9
Meat, Milk, Eggs, & Honey	568	1,115	10.1	10.4
All Forest Products	218	820	3.9	7.7
Lumber		700		
Other		120		

Source: Estimates by Scotland County Agricultural Agent.

[a] Over 50 percent hay and deh. forage.

APPENDIX TABLE 2

WHAT A BASIC ACTIVITY EMPLOYING 100 NEW WORKERS MEANS TO A TOWN'S ECONOMY[a/]

Additional	Population Change
People	359
School children	91
Households	100
	Economic Change
Registered passenger cars	91
People employed in non-basic work	65
Personal income added	710,000
Retail sales added per year	331,000
Bank deposits	229,000
Retail establishments	3

a/ Source: U. S. Chamber of Commerce - 1962.

APPENDIX TABLE 3

EMPLOYMENT BY INDUSTRY - SCOTLAND COUNTY[a/]

	1950	1960	Change
Total Employed	8799	8038	-761
Agriculture	2572	1163	-1409
Mining	--	--	--
Construction	397	312	-85
Manufacturing	2776	2905	+129
Furn. & lumber & wood prod.	270	199	
Metal industries	4	--	
Machinery	9	3	
Transportation equipment	--	20	
Other durable goods	3	325	
Food & kindred products	144	119	
Textile & apparel products	2180	2087	
Print., pub., & allied indus.	140	133	
Other nondurable goods	26	19	
Railroad & Railway Exp. Serv.	66	46	
Other Transportation	95	152	
Commun. & Utilities & San. Serv.	75	125	
Wholesale Trade	118	125	
Eating & Drinking Places	100	130	
Other Retail Trade	794	1010	
Business & Repair Services	109	114	
Private Households	490	627	
Other Personal Services	235	151	
Hospitals	115	148	
Educational Services	283	437	
Other Prof. & Related Services	73	179	
Public Administration	128	147	
Other Indus. (incl. not rptd.)	373	267	

Source: U. S. Census, 1950-1960.

[a/] Information by resident of employee.

APPENDIX TABLE 4

WORK FORCE ESTIMATES - SCOTLAND COUNTY[a/]

	1960	1965	Change
Civilian Work Force	8,930	10,110	
Unemployment	710	570	
% of Total Work Force	8.0	5.6	
Employment	8,220	9,540	+1320
Nonagri., Wage & Salary Workers Except Domestic	(5,960)	(7,360)	
Manufacturing	3,170	3,860	+690
Food	130	130	
Textiles	2,300	2,680	
Furniture, Lumber & Wood	150	160	
All Other Manufacturing	590	890	
Nonmanufacturing	2,740	3,500	+760
Construction	90	200	
Trans., Com., & Utilities	190	290	
Trade	1,010	1,190	
Fin., Ins., & Real Estate	140	250	
Service	560	740	
Government	740	830	
All Other Nonmanufacturing	10	0	
Self-Employed, Unpaid Family Workers & Domestic	1,150	1,130	-20
Agriculture	1,160	1,050	-10

Source: N. C. Bureau of Employment Security Research, Employment Security Commission of North Carolina.

[a/] March estimates by place of employment.

APPENDIX TABLE 5

LAURINBURG AND SCOTLAND COUNTY POPULATION TRENDS

	Laurinburg	No Increase	% Change	Scotland County	No Increase	% Change
1900	1,334			12,553		
1910	2,322	988	74.1	15,363	2,810	22.4
1920	2,643	321	13.8	15,600	237	1.5
1930	3,312	669	25.3	20,174	4,574	29.3
1940	5,685	2,373	71.6	23,232	3,058	15.2
1950	7,134	1,449	25.5	26,336	3,104	13.4
1960	8,242	1,108	15.5	25,183	-1,153	-4.4
1970	9,700	1,458	17.7	26,600	1,417	5.6
1980	14,100	4,400	45.3	28,600	2,000	7.5
1987	15,400	1,300	--	30,100	1,500	

Source: U. S. Census of Population. Projections by Division of Community Planning, Department of Conservation and Development.

APPENDIX TABLE 6

1950-1960 MIGRATION TRENDS BY RACE

Total	Scotland County
1950 Population	26,336
Natural Population Increase During the Decade (April, 1950-April, 1960)	5,500
Expected 1960 Population	31,836
Actual 1960 Population	25,183
Population Loss From Migration	6,653

Source: U. S. Census of Population, North Carolina State Board of Health, Vital Statistics, 1950-1960.

APPENDIX TABLE 7

EXISTING LAND USE DATA FOR LAURINBURG, NORTH CAROLINA

Use	City		East Laurinburg		Fringe Area		Planning Aree	
	Acres	% of Developed Land	Acres	% of Developed Land	Acres	% of Developed Lend	Acres	% of Developed Land
Residential								
One-Family	557.0	26.0	36.0	45.3	397.5	32.8	990.5	28.8
Two & Multi-Family	36.0	1.7	--		--		36.0	1.0
Mobile Home	1.0	0			9.5	.7	10.5	.4
Retail Trade								
Primary	5.1	.2	--		.5	.1	5.6	.1
Secondary	36.3	1.7	--		7.7	.6	44.0	1.3
Convenience	22.4	1.0	1.8	2.2	12.1	1.0	36.3	1.0
Services								
Consumer	31.4	1.5	2.6	3.2	27.9	2.3	61.9	1.9
Professional	7.3	.3	--		1.5	.1	8.8	.2
Business	2.2	.1	.4	.5	.4	.1	3.0	.1
Social & Cultural								
Personal Develmt.	960.8	44.9	8.3	10.4	90.3	7.6	1059.4	30.9
Health & Welfare	6.2	.3	--		--		6.2	.1
Cemetery	53.0	2.5	--		2.1	.1	55.1	1.6
Wholesale Trade	7.0	.3	--		2.6		9.6	.4
Manufacturing								
Services	30.1	1.4	2.2	2.7	9.2	.7	41.5	1.2
Others	27.5	1.3	8.1	10.2	104.6	8.7	140.2	4.1
Transportation								
Streets & Alleys	337.1	15.8	15.1	19.5	513.4	42.4	865.6	25.3
Railroad	21.1	1.0	4.8	6.0	33.1	2.8	59.0	1.7
Depot	.7	--		--			.7	
Developed Land	2142.2	100.0	79.3	100.0	1212.4	100.0	3433.9	100.0
Vacant	737.8		--		7684.7		8422.5	
Useble Vacant Land	562.8		--		5972.7		6535.5	
Subject to Flood	175.0		--		523.0		698.0	
Unsuitteble (Septic Tanks)	--		--		1189.0		1189.0	
TOTAL LAND	2880.0		79.3		8897.1		11,856.4	
Square Miles	4.5		.1		13.9		18.5	

Source: Field Survey by Division of Community Planning made February, 1967.

APPENDIX TABLE 8

LAURINBURG LAND USAGE COMPARED WITH OTHER CITIES
(Percent of Development Area)[a/]

	Laurinburg		Sanford	Dunn
Population[b/]		8,242	12,300	7,566
Land Use				
Date of Survey		1967[c/]	1962	1964
Residential	27.7	45.3	51.8	49.8
Retail Trade & Service	4.8	8.0	6.1	6.5
Social & Cultural	47.7	14.4	7.6	5.4
Wholesale Trade & Manufacturing	3.0	5.0	8.5	8.7
Transportation	16.8	27.3	26.0	29.6
	100.0	100.0	100.0	100.0
% Developed	74.3		64.4	74.8
% Vacant or Agricul.	25.7		35.6	25.2
	100.0		100.0	100.0

[a/] Survey by the Division of Community Planning.

[b/] U. S. Census of Population, 1960.

[c/] Percent of developed area when excluding St. Andrews College.

APPENDIX TABLE 9

LAURINBURG LAND USAGE COMPARED
(1957 and 1967)[a/]

Land Use Categories	1957		1967		
	Acres	% of Developed Land	Acres	% of Developed Land	% of Developed Land[d/]
Residential	577	49.9	594	27.7	45.3
Retail Trade & Services (Commercial)	46	4.0	105[c/]	4.8	8.0
Social & Cultural (Public & Semi-Public)	149	12.9	1020[b/]	47.7	14.4
Wholesale Trade & Manuf. (Industrial & Wholesale)	59	5.2	65	3.0	5.0
Transportation	325	28.0	359	16.8	27.3
Developed Land	1156	100.0	2142	100.0	100.0
Vacant	1424		738		
Total Land	2580		2880		

[a/] Due to differences in land use categorization, certain differences occur in the comparison of the 1957 and 1967 land use categories.

[b/] Annexation of St. Andrews College.

[c/] Difference due to automobile dealers which have relocated from the Central Business District to large sites on the bypass.

[d/] Percent of developed land when excluding St. Andrews College.

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